MICROBES, MEN AND MONARCHS

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A Doctor's Life in Many Lands

THE AUTOBIOGRAPHY OF
ALDO CASTELLANI

LONDON
VICTOR GOLLANCZ LTD
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H M Queen Marie José

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CHAPTER I

CHILDHOOD AND BOYHOOD

IT IS THE remote year 1882, and the place a tiny hamlet in the Tuscan Hills A thin little boy, not yet four years old, pale-faced and fair haired, is sitting on a narrow plank at a long wooden t

... is bending over him and trying to soothe him, but in vain Why does the child feel so miserable? He has heard the piteous squealing of some *porcellini*—little pigs—being brought to slaughter in the primitive village abattoir nearby

The physical description of the child—myself—was given to me many years later by the same kindly woman, then no longer young But I remember the scene vividly it is my first clear recollection in life To this day, visiting an abattoir—often one of the duties of a doctor in the Tropics—is an ordeal to me, and the bellowing and bleating of the doomed animals makes me physically ill

Why, at that tender age
an out-of the
Florence? I
were warned ... should certainly become a victim of the much dreaded *scrofula*—a tuberculous infection of the lymphatic glands, then very common—if I were not sent to the country for at least two years, where I could live the life of a little *contadino*, breathing the pure air of the fields and sharing the plentiful fresh farm produce of milk, eggs, and butter City doctors of those days often gave this advice.

Although at the time little was heard about open air treatments, and the word 'vitamin' had not been coined, the benefits of living in the open air were universally admitted, as well as the advantage of fresh food in plenty The child was supposed to remain in the country for a minimum period of two years, and the parents were supposed never to go and see him, except at

Christmas The *contadino* family was usually that of the child's wet nurse, and so it was in my case

The separation soon grew unbearable to my mother, who became so ill from worry that after only a few months my father came and took me back to Florence

The *contadino* is a peasant who lives and works on a small farm of which he is neither the owner nor—since he pays no rent—the tenant The land belongs to the *padrone*, or landlord, and every crop grown on the farm is divided into two equal portions, of which one belongs to the *contadino* and the other to the land owner This method of cultivating the land originated in Tuscany many centuries ago, and later spread to other regions of Italy there are *contadini* families in Tuscany who have lived and worked on the same farm for over four hundred years

The *contadino* is a very likeable individual, with charming manners He is a real gentleman in his bearing, very respectful to his landlord, but never servile He is shrewd and intelligent, and considers himself far superior socially to the other workers on the land He lives in a small house or cottage on the farm, for which he pays no rent, and he receives no wages The other workers live in villages, and work on the land only when the land-owner or the *contadino* requires them, they are paid so much a day, and only for the days they work The *contadino* looks down contemptuously on all wage earners, and especially on factory workers, although they wear fine clothes and have plenty of money jingling in their pockets, while he himself may go about in tattered, homespun clothes full of patches, and pockets empty of cash If his daughter marries one of these fellows it is a misalliance and a great blow to the family pride

* * *

When I was a child, artificial infant feeding was practically unknown in Italy if a mother, for reasons of health or other motives, could not nurse her baby, a *balia* or wet nurse was brought in from the country, usually from some distant mountainous district known for the healthiness of its inhabitants—simple and rather primitive people not yet contaminated by city dwellers

The wet nurse was a most gorgeous person to look at as she

took her afternoon outing, carrying the swaddled babe on a large, soft, lace trimmed pillow She was invariably a buxom young woman and her expression was one of pride She was dressed in ample skirts with numerous petticoats of various colours and slightly different lengths, so that the hem of each one could be seen A very short, bright red, blue, or yellow velvet bodice encased her waist, and a spotless white blouse tightly enveloped her swelling bosom Her black hair was done in a large knot, rather high on the back of her head it was transfixed by a number of long silver or gold pins in the pattern of a half halo

After about a year the nurse would leave the city family which had engaged her, and return to her own children in the country But her affection for the city *bambino* never waned, and regularly once a year she would take the long journey to see him. To her he always remained a *bambino*, even when grown up into a sturdy young man—and even much later, when showing definite signs of approaching middle age I well remember, during my first leave from Ceylon, going to Florence to visit my mother The old nurse heard of it, and one day she appeared at our house asking for me Overcome with emotion, she put her arms round my neck, and her eyes filled with tears as she exclaimed "*Il mio caro bambino, ma dove sono i bei riccioli biondi?*" ('My precious babe! But where are your golden curls?) My hair was dark, smooth, and distinctly thinning

* * *

When I was taken back to Florence from my brief stay in the country, we lived in an old house in Via Fiesolana, which I dis liked because it was so dark, but shortly afterwards we moved to another house, light and airy, in Via Cavour There an event occurred which has remained vividly impressed upon my memory In 1884 King Umberto I paid an official visit to Florence, and the procession passed along our street I was about five years old, and was on the balcony with the rest of the family As soon as I saw His Majesty in the royal carriage—a striking figure with an enormous white moustache—I shouted at the top of my voice "*Evviva il Sor Rene!*" *Sor* is the plebeian Florentine word for *Signore*, and *Rene* for *Re* The word *Signore* or its lowborn substitute *Sor* is never used before 'King , and sounds

funny in Italian One would have the same impression in England if a child shouted "God save Mrs Queen!"

This manifestation of loyalty clearly pointed to my political faith in later life, although it certainly never occurred to my childish mind that I should one day become the physician and faithful servant of His Majesty's grandson, Umberto II

Other recollections of this period are hazy I hardly remember my brother and sister, who were some eight and ten years older than I, and in whom I took no interest. I considered them very grown up, and quite outside my circle, but I remember perfectly my parents and my paternal grandmother

My mother appeared to me as an angel fair haired, blue-eyed, and with an expression of sweetness I can never forget She was endowed with a vivid intelligence, and culture was also hers one of her teachers had been the well known Pietro Thouar, the leading educationalist of the time Left an orphan when quite a young child, she was brought up by her godfather, Baron Bettino Ricasoli, the celebrated statesman who later became Prime Minister of the Kingdom of Italy She married my father when she was only sixteen

In my mother's family, over two centuries ago there had been a saint—Santa Veronica Giuliani (1660–1727)—and mother, with her delicate oval face and sweet expression, showed a striking resemblance to her saintly ancestor, whose portrait hung in the bedroom

I adored my mother, but I confess I never felt any warm affection for my father—only filial respect

Father was very tall very thin, and straight as a ramrod His face was long lean cheeked and rather angular His abundant grey hair was cropped short *en brosse*, and he had a small greying moustache Poor father, he was in a constant state of nerves, and his brow was perennially wrinkled No doubt he meant well towards his children but he had his own ideas of upbringing and education He never had recourse to corporal punishment, but was a firm believer in prolonged lectures and sermons On occasion he would keep us sitting at table for hours on end, after luncheon or dinner, delivering interminable philosophical discourses, chiefly on the duties of children towards their parents How I detested those lectures! And I detested even more having to sit still for so long

Father was seldom in Florence he spent most of his time in

Chianti, the famous wine country, where he had a fairly large estate, and the wines from it had quite a good name

He was the son of Luigi Castellani, the descendant of an ancient Florentine family whose name is still borne by an old narrow street close to the Palazzo Vecchio—Vicolo Castellani, which, I understand, has now blossomed into Via Castellani

Luigi's father was an inveterate gambler, and lost everything he possessed Luigi, who had a great liking for music, then began to make stringed musical instruments, and became well known for his violins, and also for a particularly large guitar which was much appreciated by connoisseurs in England and America My father took no interest in the instrument business, which, indeed, he rather despised, and on my grandfather's death he disposed of it His sole interest in life was agriculture, and he wanted me to be an agriculturist. I was to disappoint him

My father's mother, for many years a widow, dominated our family She was, I regret to say, tyrannical and malicious She detested her daughter in law, although no person in the world could have been of a more submissive and angelic disposition She was for ever trying to bring disruption between husband and wife, and many times I saw my poor mother leave her room in tears Although an insignificant member of the family, I was one of her pet aversions, and I returned her dislike tenfold because of her cruelty to my mother

I can visualize her [illegible]
slightly bent, but stil [illegible]
from room to room, [illegible]
and pasty, and the corners of her mouth turned down—never a smile played about her thin lips Her hair, still naturally black and shining was parted in the middle and descended in two smooth, thin bandeaux, one on each side of her head, covering part of the ears Miserly and avaricious, she was eternally complaining of the household expenses, and that the children, especially the *midiardolo* (meaning me), were pampered

To economize, she gave strict orders that at breakfast we should have dry bread with our cafe au lait The *bambinaia*—a sort of nursery maid who looked after the children in addition to helping with the household duties—was a kind hearted girl and, notwithstanding Grandmother's order, continued to spread plenty of butter on our slices of bread But she took

certain precautions! When Grandmother approached the breakfast room she would rush in and whisper loudly: "Signora Fanny! Signora Fanny!"—at the same time raising her hands, palms up, and then quickly turning them palms down. This was the signal: the slices of bread and butter were instantly turned over, and Grandmother saw only the unbuttered side.

The term *nidiandolo* is applied to the youngest child when it is born years after the others. I was the *nidiandolo*, the child who is generally made a lot of, petted and pampered. But there was little petting and pampering in my case, except perhaps on the part of my mother.



At the age of four, soon after returning from the country, I was sent to kindergarten school. I cannot say that I enjoyed it much. Each small boy was given a modest plot of land which he had to cultivate: he had his little hoe, his little spade, and his little rake. But I was not cut out to be an agriculturist, and I loathed it.

I liked the young mistress in charge, and I think I was well behaved. I was not at all obstreperous, and was never punished. The usual castigation given by her was a very mild one: a few taps on the hand. One little boy confided to me once that he enjoyed being punished by the *Signorina*, and was often naughty on purpose, which surprised me greatly at the time.

I must have been six or seven when I was with my mother at Viareggio, a popular seaside resort not far from Pisa. We went there for a few months every year for the same reason as that for which I had been sent to the country—my parents' dread of my developing scrofula, which may be compared to the present-day dread of poliomyelitis.

I loved Viareggio, with its beautiful soft sands and lukewarm sea. I called it *paradiso terrestre*, my paradise on earth. One black spot, however, spoilt this paradisiacal life. Mother insisted that I should have music lessons, and every morning a pianoforte teacher came punctually at eight-thirty for half-an-hour, after which I was free to run to the beach, where I spent the rest of the day.

The teacher was a youngish woman with rather pleasant features and a gentle manner. Patiently she tried to teach me

the elements of the piano, but I disliked music intensely and was incapable of learning a note Gradually my dislike of music extended to the teacher herself, whom I came almost to hate

From a medical point of view, it is interesting to note that my dislike for music was so profound as to cause me actual physical discomfort I was, in fact, allergic to music I well remember my mother, who was very fond of opera, taking me several times in later years to the Opera House in Florence during the season. Every time, the moment I heard the orchestra starting, I was seized by an uncontrollable attack of sneezing, exactly as if I had hay fever As I grew older a certain amount of 'desensitization' set in, but it was never complete The highest degree of music I can stand at present is Gilbert and Sullivan opera, and not too much of that. Highbrow music I loathe, and classical concerts represent to me the most diabolical form of punishment, comparable only to Chinese torture

Dislike of music, and allergy to it, are not such rare conditions as some people may think, but most persons so affected deny the affliction for fear of being considered uncultured. They may, however, confess it to their medical attendant. I well remember a lady patient of mine, married to a famous pianist, who asked me to give her some tranquillizing drugs to take before her husband's concerts

"I suppose," I said, "you are worried for your husband, and the possibility of the concert not being a success?"

"Not a bit," replied my patient. "You're a doctor, and I can be quite frank with you Music to me is merely a series of unpleasant noises, and I detest it, whoever is playing It was certainly not his music that made me fall in love with my husband" The lady used the words which, according to tradition, were uttered by a very famous king of the House of Savoy, when he had to grace a concert with his presence the only music he understood was the rolling of drums and the booming of guns Catherine the Great, Empress of Russia, wrote in her memoirs "Music to my ears is seldom more than a noise"

The incapacity to enjoy music is accompanied in some unfortunate people—I am glad to say I am not one of them—by the inability to appreciate the visual beauties of nature A friend and companion of mine, of Scottish birth, when marching in Uganda not far from Lake Albert, remained quite unmoved when the lifting of the morning mist suddenly revealed in the

distance the mighty blue black range of the Ruwenzori Mountains, their peaks covered with eternal snow—Ptolemy's 'Mountains of the Moon' Hardly looking at the sublime sight, he enquired when the march would be over, and when we were going to have luncheon



After the kindergarten I was sent to various preparatory schools in Florence, Rome, and elsewhere My parents moved about a great deal during those years, but memory is capricious and, with the exception of one episode, I hardly remember anything of that period At a small private English school for juniors, where I was the only foreigner, the tiny tots were made to say their evening prayers kneeling at their bedside Then at a given signal from the matron they would all stand up and sing in chorus "Good and Almighty God, we thank You above all for having allowed us to be born English children" There was a definite jingo atmosphere about the school Everyone was very patriotic, and the children had a favourite doggerel which ran "Two skinny Frenchmen one Portugee, one jolly Englishman beats all three"

After my family had settled once more in Florence, the time came for me to be sent to a secondary school The choice lay between the *Ginnasio* for a classical education lasting eight years, after which one could enter any of the university faculties, and a technical school for a non classical education lasting seven years after which one could be admitted to only three university faculties the engineering the agricultural or the commercial

My father had an inborn horror of Latin and Greek and the classics in general and would often repeat the saying of the famous Frenchman "*Qui nous delivrera des Grecs et des Romains!*" He believed only in technical and practical education and, as I have said his ambition was for me to be an agriculturist

So I went to the *Scuola Tecnica* a state school where Latin and Greek were not taught and the pupils were prepared for strictly technical professions I detested having to make out invoices calculate percentages and discounts and do geometrical drawings I stood it for three miserable years and then implored my mother to send me to the *Ginnasio* But there was one great

difficulty the curriculum in the *Ginnasio* was five years, and I had lost three in the technical school, therefore I would have to condense the five-year curriculum into two years Could I do it? My mother believed I could, but all her friends said it was an impossibility She then went to consult the renowned French teacher, Professor Joseph Domengé, who had just opened a private school in Florence He asked to see me, and after a brief interview told my mother there was a chance, so I went to his school.

My father knew nothing about this change of tuition, as we all feared his reaction to it The monthly reports from the technical school had been poor, and he had formed the definite opinion that I was not much good, and often told my mother that I would never achieve anything Once I overheard him say this. I was cut to the quick, and made a note of it on the fly-leaf of my Greek dictionary Henceforth, whenever I felt tired or disinclined to study, I would read those lines, and the will to work and to further effort would instantly revive

Summer holidays were spent at Montepiano, in the Appennines, where my father in later years had an estate, in addition to the one in Chianti I worked intensively Every morning, when father was out on horseback visiting the grazing farms, I took out my Latin and Greek grammars and studied hard My father generally returned at noon, but occasionally earlier From the window of a nearby peasant's cottage the whole of the winding road leading to our house could be seen, and I instructed the peasant's young daughter to wave a red cloth as soon as she espied Father approaching on his horse At this signal, all the Latin and Greek books were flung under the sofa I often felt the humour of the situation Father at lunch, expatiating on the benefits of a technical education, belittling the Humanities and the Classics, while sitting unknowingly *over* a heap of Latin and Greek books

Two years later the great day of the State examination for the *Licenza Ginnasiale* arrived. I was frightened to death, but I passed, and entered the *Liceo* After three years, another terrible examination the *Licenza Liceale*, the most dreaded in the life of an Italian student, which opens—or closes—the door to the university Those days were a horrible ordeal I was certain I should fail, but was again successful, and first on the list. My joy was unbounded I immediately took a cab, drove at great

speed to the University, and rushed upstairs to the Secretariat I was surprised when the Secretary asked me which faculty I wished to join "Medicine, of course," I replied

I had wanted to be a doctor ever since I was a small boy The old *bambinaia*, who had remained in our service as a chamber-maid, told me that when I was quite tiny I constantly proclaimed I should be a doctor when I grew up (The strange part of it was that in my family there had never been any medical men) She also told me that once somebody said to me "Suppose, for certain reasons, you can't be a doctor, what would be your next choice?" After a few seconds' cogitation I answered "A bishop!" I must have been influenced by a bishop who stayed for a few days in our villa at Chianti while on his diocesan pastoral visit I remember him as a nice, plumpish, rather short old man, with silvery hair, a ruddy complexion, and a round, smiling face One morning he had to go to the village church for a confirmation service, and while he was out I followed the maid when she went to tidy his bedroom The room reeked of tobacco, and I saw several cigar ends on the night-table It was a shock to me, and I enquired of the maid "Do bishops smoke?" "Yes," she answered, "in private " I was, however, soon to experience a still greater shock When the bishop returned, I saw him enter the lavatory It had never occurred to my childish mind that such high ecclesiastics as bishops, or exalted persons like kings and queens, were burdened with the same excretory functions as other mortals And I fear he fell precipitately in my estimation the halo with which I had encircled his head vanished suddenly and for ever

CHAPTER II

MEDICAL TRAINING·

FLORENCE UNIVERSITY, BONN UNIVERSITY, THE LONDON SCHOOL OF TROPICAL MEDICINE

I ENTERED FLORENCE University as an extremely young student in 1893, and qualified in 1899 In those days the medical curriculum in Italy was six years—longer than in most other countries, except Holland, where it was eight years In England it was four or five years, depending upon the qualifications one wanted to obtain

They were six happy years There was little time for sport and games, and I never excelled in them I was, however, very keen on fencing, chiefly for the reason that it took up very little of the time dedicated to my studies a quarter of an hour of violent fencing induces the same amount of perspiration and [illegible]

[illegible] the university when news came to the school that there was to be [illegible]

but with luck you might get a silver one

I have some vague recollections of the journey It was winter and very cold, and for the sake of economy I was travelling third-class At the Austrian frontier I changed into a fourth-class carriage for the same reason We reached Vienna, and after a few hours there—I well remember the delicious Viennese black coffee topped with whipped cream—we took another train, still fourth-class, to Prague, a terribly slow train which seemed to stop at every village The fourth-class cars had neither seats nor benches, the passengers sat or sprawled on the floor, which was covered with straw In the centre of the compartment was an open charcoal-burning stove, with the metal chimney going through the ceiling We huddled round that stove Outside it was snowing, and flakes fell through the half-

shut sliding doors, similar to those of British luggage vans. I well remember the peasants clambering into our carriage. They were dressed in bright colours, and both men and women wore tall Wellington boots reaching well above the knees. The smell of damp, unwashed humanity was appalling.

In Prague we were taken care of by the tournament hospitality officials, who found us accommodation in a small boarding house. The tournament began the day after we arrived, and there was a *fioretto* (foil) tournament and a *sciabola* or sword tournament. I took part in both. In the *fioretto* I was thrown out in the very first bout by the man who eventually won the tournament. I did a little better in the *sciabola*, and was the last of those entitled to a gold medal.

One *grand coup* remains in my memory. In one bout my opponent was a wild, burly Hungarian who, when the signal to start was given, charged at me like a bull, twirling his sword above his head like a windmill. I felt sure that if the sword struck me it would split my mask and cleave my skull. Fortunately, a move taught me by my fencing master in Florence flashed through my mind—the *inquartata*. You suddenly turn sideways, the left foot outside the strip, and stick the point of your sword into the onrushing opponent's breast—fully protected, of course, by the padded leather vest. This I did. It stopped his attack, and his sword, instead of descending upon my head, hit the footboard and made a deep gash in it.

I was very proud of my large medal surrounded by a circle of flaming rubies. I thought to myself, 'I'll go to the goldsmith and sell it at once, so that I can return home second class instead of fourth.' All my life I have had a weakness for travelling in comfort, if not in luxury. The rubies unfortunately turned out to be fakes, but luckily the medal itself was genuine gold. The money I made on it, however, was not enough to buy me a second class ticket, so I invested in a third class one, and even that was luxury in comparison with the fourth.

* * *

But let me return to my work at the university. I enjoyed every minute of it, especially the clinical and bedside work. Among the professors, my favourite was Pietro Grocco. His name is known to every medical student in the world from a

celebrated diagnostic sign, the *Grocco triangle*, which is a triangular zone of dullness on the opposite side of a pleural effusion.

Grocco appointed me a *studente interno*, which meant that I lived in the university hospital as a sort of voluntary assistant. There were only three other *studenti interni* in his department. Most of my time was spent in the wards examining patients, whom I often bribed with small gifts of money (I could not afford much) to let me prolong my examination I took a passionate interest in physical diagnostic methods, especially percussion in this, the middle finger of the left hand is placed on the patient's body and is tapped with the middle finger of the right hand, eliciting different sounds according to the density of the organs and structures beneath In this way I delimited more or less accurately numberless hearts, lungs, and livers I was always at it. Seeing my constant hammering on chests and abdomens, my fellow students bestowed on me the nickname *Martellino*, or little hammer

I enjoyed Grocco's lectures above all others They were practical, and he always showed interesting cases to illustrate them Another of the teachers for whom I had great respect and admiration was Guido Banti, a man of clear thinking and limpid expression He taught us a great deal of theory, yet his lectures were always lucid he made the most abstruse subjects easy to understand Banti was the last professor of morbid anatomy in Italy who was also a renowned clinician. 'Banti's [illegible]

[illegible] programme, the hall soon fills up, and there is *plenty of heated* discussion " It is a prolonged illness [illegible] spleen (splenor [illegible] of the liver B [illegible] manner, but found that removal of the spleen would cure it

Surgery I liked, but not so much as internal medicine and dermatology This may *possibly* have been due to the fact that the then professor of *surgery*—a good surgeon, but chiefly

known as one of the best shots in the country—discouraged his students from being in the wards, so different from Grocco, who believed in practice, practice, and more practice The Professor of Surgery's lectures were long and tedious he had a mania for interspersing surgical matters with pseudo scientific bits of morbid anatomy, general pathology, histopathology, and bacteriology, about which he knew nothing Students always sense whether a teacher is talking about something he really knows, or does not know but has picked out for the occasion in order to show off This particular surgeon never allowed any of his assistants to operate, he kept them busy cutting histology sections in the laboratory

Dermatology, which attracted me immensely and in which I still take a keen interest, was taught by the famous Professor Pellizzari, the best known dermatologist in the whole of Italy

Bacteriology was taught by Professor Senator Lustig of plague vaccine fame, but it was considered a branch of general pathology and the tuition was chiefly theoretical I was instructed in the practical rudiments by one of Professor Grocco's senior assistants, Dr Silvestrini, whom I liked and admired Silvestrini became Professor of Medicine at the University of Perugia, and I am glad to say is still active and enjoys great fame

* * *

In thinking over those days, I cannot resist commenting on the tremendous progress medicine has made since then, especially in therapeutics At that time the scientific trend was to relegate therapy to a very minor place—and, indeed, there were reasons for this apart from mercury in syphilis and quinine in malaria no specifics were known and none of the 'wonder drugs had been discovered Our teachers of the scientific type perforce inculcated their pupils with the Hippocratic doctrine Hippocrates gave supreme importance to an innate healing power present in the human organism *lix medicatrix naturae*—which certainly exists but fails to overcome many diseases leave a sleeping sickness patient or a kala azar patient to the therapeutic efforts of nature, and he will die without fail Therapeutic scepticism reigned also in Arabian medical literature In the Nozhat el Majalis one reads What purpose do doctors serve? And the answer is 'They earn their

living and cultivate hope in the heart of the patient until Allah either takes away his life or gives him back his health."

The scepticism found in high scientific medical spheres was not shared, however, in lesser regions, and practitioners at all times implicitly believed in numberless drugs and peculiar methods of treatment. For centuries, for example, over bleeding, over purging, and over-clystering were carried out with great zest. The Empress Catherine recounts in her memoirs that during one serious illness she was bled regularly four times a day And what prodigious numbers of enemata did the French kings receive, including the Roi Soleil It may truly be said that during the sixteenth, seventeenth, and eighteenth centuries the chief weapons in the doctors' armamentarium were the lancet, the enema syringe, and the powerful purgatives

"Clysterium donare
Postea seignare
Ensuita purgare
Reseignare, repurgare
Et reclysterisare'

In my student days bleeding had gone out of fashion, but drastic purging and profuse clystering still held sway, and I remember Grocco strongly criticizing such methods Anticipating, I may say that the last mentioned procedure continued to be popular for many years, until in the 'twenties it had to give pride of place to the celebrated 'colonic lavage' Some of the 'temples' in which this voluminous hydro-operation was worshipped, and carried out with due formality and dignity and at times pomp, became fashionable centres where members of the aristocracy, plutocracy, and intelligentsia met in pleasant social intercourse. Let me add that modern medicine cannot claim colonic lavage [illegible] classes two t[illegible] in those rec[illegible] gatherings

* * *

In my time the freedom granted to students in Italian and German universities was astounding, there was no roll call, and they could attend lectures and even practical classes or not as they pleased

In the summer months I went to England and 'walked' the hospitals, chiefly Charing Cross Hospital The organization of medical tuition in England was quite different from that of the Italian and German university medical schools In fact, I was most surprised to find that one could become a doctor without attending the university at all, but simply by working at the hospital medical school and then obtaining the qualifications of the two Royal Colleges or of the Society of Apothecaries Strictly speaking, these qualifications did not entitle one to be called a doctor only the M D s were entitled to this

Every senior hospital physician was a lecturer in the school attached to the hospital, and this teaching made excellent general practitioners In Florence the lectures were given by a professor surrounded by twenty or thirty fully qualified assistants robed in long white gowns, at Charing Cross an ordinary visiting physician delivered the lecture alone, or occasionally with the house officer in attendance

Of my English teachers the one I liked best was Dr Mitchell Bruce of Charing Cross Hospital He had at that time a huge consulting practice, but he never failed to be in the wards at the appointed time I remember the thrill I had when he showed us a case with the symptoms of *tabes dorsalis* (locomotor ataxia) with, in addition, several swollen large joints He asked the class to name the disease, and nobody answered Then, looking at me, he said, "Perhaps our foreign guest will reply' I blushed and after some hesitation answered, "Charcot's disease" I also remember Bruce showing us cases of pernicious anaemia, which was considered incurable in those days Arsenic was generally given, and occasionally improvement took place, but only for a short time Mitchell Bruce was one of the kindest of men, and had the most charming manners One day he asked me to lunch at his house, 23 Harley Street, he had the whole house to himself, and I was awed by the enormous, palatial establishment I little dreamed that many years later that same house would be mine—although run on much humbler lines

* * *

In July 1899 I passed the final examination in medicine, surgery, obstetrics, and dermatology, and discussed my doctorate thesis I was, as usual, terrified and absolutely certain

that I should be ploughed, but I was lucky, and my name came first on the list of new doctors.

My thesis, on the isolation of the typhoid bacillus from the blood, was approved *cum summa laude* In those days, in addition to the thesis, the candidate had to discuss two minor theses which were called *tesine* One of these was on a gynaecological subject, the other on a dermatological one, the subject of the latter was *Trichorexis nodosa* A law student friend of mine, of the University of Pisa, had been suffering for the past two years from abundant dandruff (*pityriasis sicca*) When he consulted me as a future doctor, I proudly prescribed a lotion consisting of two per cent salicylic acid in alcohol, as usually recommended by my teacher, the famous Pellizzari He was a most enthusiastic and energetic young fellow, and rubbed in the lotion four times a day for months He then began to notice in his hair minute greyish nodules at the level of which the hair shaft broke He was very upset, and consulted various Pisa medical students. The diagnoses made were numerous and varied, from ringworm to the nits of lice In desperation he then came to Florence to see me. It was a case of *traumatic trichorexis nodosa*, caused by the too violer

salicylic alcohol solution

tesina, and had the hon

Pellizzari himself, who was a member of the examining board

I have never forgotten my pride when I was declared an M D I went the same day to a nearby chemist and asked for a tube of Pyramidon tablets The chemist refused "You must have a doctor he said "Well, give me a first professional prescrip-

For a few months I acted as voluntary assistant in the university hospital, then I decided to go to Germany It was the fashion at that time for the young doctor who wanted to get on in his profession to work in Germany for a year or two, just as it is the fashion nowadays to visit America for the same purpose

I obtained an introduction to Professor Kruse, the famous German bacteriologist, and proceeded to Bonn University, where he was teaching Bonn in those days was a small, quiet, charming town. Although geographically it was part of Prussia, the people certainly did not look like traditional Prussians—they were friendly, charming and gay I called on Professor

Kruse at the Bacteriological Laboratory of the University Institute of Hygiene He was a typical Saxon, and I liked him a fine, tall, slim fellow of thirty-seven or thirty-eight, with a short blond beard and fair hair, he had a fresh complexion and an open, engaging, friendly look He spoke Italian perfectly Hearing of my desire to do some bacteriological research, he agreed to take me on "You will start from tomorrow," he said, "and for two weeks you will work downstairs in the kitchen, learning how to prepare media for growing and keeping alive bacteria"

Being a fully qualified doctor, although a very new one, I was taken aback I had expected to be asked to start at once an investigation on some high-sounding subject in the professorial laboratories For two weeks I toiled assiduously in the kitchen, and mastered the secrets of making good broth, clear translucent gelatine, and various jellies I also became proficient in peeling potatoes and slicing them into small, neat blocks for culture purposes During this period I never once saw Kruse After a fortnight of this basement activity, I was called to his office

"I have had a good report about you from the *Diener* (laboratory attendant)," he said, "and I hear you can now prepare media satisfactorily From today you will start working in my laboratory"

I did so, and it was in his laboratory that I found the so-called 'Absorption Test', known also as Castellani's test, which has become a commonplace routine for the differentiation of closely allied bacteria in laboratories all over the world It was published in the *Zeitschrift fur Hygiene und Infectionskrankheiten*, 1902, vol 40, p 17

Anticipating very many years, I may be allowed to mention that Bonn University has recently honoured me by giving my name to one of the laboratories of the new University Institute of Hygiene

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I was quite happy in Bonn, but since boyhood I had felt the urge to visit the tropics and work there So, after a time, I decided to take a course at the London School of Tropical Medicine One of my father's friends was Professor Sonsino, a famous parasitologist who had retired to a life of leisure (and boredom) at Montepiano, where my father still had some grazing farms

He gave me a letter of introduction to Sir Patrick Manson, then Dr Manson, in London Sonsino had worked for years in Egypt and other parts of the Tropics, and Manson esteemed him greatly (Manson once said, however, "Sonsino attaches too much importance to *minutiae* and is always ready to fight over them Never do that, Castellani!")

The day I arrived in London I called on Dr Manson at his house in Queen Anne Street What admiration and affection I immediately felt for him! Physically he was a tall man, with silvery white hair, a white moustache, and a fresh complexion He was lovable, kind hearted, courteous, and paternal He was indeed a father to me, and to him, and later to Sir Ronald Ross, I owe whatever little success I may have had in my career He admitted me to the School of Tropical Medicine which he and Sir James Cantlie had recently founded, under the auspices of the Colonial Office, in connection with the Seamen's Hospital at the Albert Docks The School in 1902—the third year of its existence—was very small, consisting of a couple of wards in the Seamen's Hospital and one rather large laboratory which was also used as a lecture room The thirty-odd students were mostly British, with a sprinkling of Indians and one or two Negroes

The teaching was practical Manson taught internal diseases, and James Cantlie surgical diseases We were all spellbound by Manson's fascinating lectures, based entirely on his own experience and investigations He used often to enliven them with anecdotes about his scientific investigations One of these had to do with an important discovery which Manson had made in China in the 'seventies He had found that the slender filiform worm which causes tropical elephantiasis, and which he called *Filaria nocturna* because of its tiny, snake like embryos swarming in the blood stream at night, was carried by mosquitos, an incredible idea in those days On his first leave home he delivered an address on the subject before an ancient and famous medical society in London At the end of the address the applause was meagre, and the President, a conceited and pompous old gentleman did not utter any of the customary presidential eulogies extolling the lecturer's work instead, as Manson went to his seat at the back of the room, he winked at the front row of the audience, and tapped his forehead significantly

Another of Manson's anecdotes concerned the time when he

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CHAPTER III

UGANDA

In April 1902 I was an obscure student at the London School of Tropical Medicine. One day Sir Patrick Manson, after one of his unforgettable lectures, announced that the Foreign Office, in consultation with the Royal Society, had decided to send a scientific expedition to Equatorial Africa and Uganda to investigate an epidemic of sleeping sickness which was exterminating the indigenous population. Two members of the expedition—Dr George Low and Dr Cuthbert Christy—had already been appointed, but the well known bacteriologist who was to have completed the expedition had resigned for family reasons, and someone was needed to replace him. Would one of us who knew something about bacteria volunteer to go in his stead?

I had always wanted to go to the Tropics, and I thought that my chance had come. I immediately stood up, to find that the entire class had done likewise: they had all become bacteriologists! The fact is that in those days every young man craved adventure. Sir Patrick decided to hold a sort of competitive examination, and it so happened that I came out top. He naturally asked the Superintendent of the School for further information. I was told afterwards that the Superintendent said something like this: "Castellani? He is a peculiar young man. I have never come across anyone quite like him. He comes to the laboratory at a most unearthly hour in the morning when it is still dark, and greatly interferes with the work of the charwoman. She hates him, and has given notice to leave. The janitor also dislikes him: he has to cut off the gas at night to get rid of him. However, the young man knows his bacteriology well, having been trained in Germany by Kruse. I recommend him for the post, sir." And as an afterthought he concluded: "At any rate he [illegible]

So it came about that my name was sent up to the Foreign Office as a suitable candidate. Three days later Sir Patrick

was practising in Hanoi He had redecorated his consulting room, and was inordinately proud of a new Bokhara carpet which he had put on the floor. One day a burly Chinese peasant came in complaining of a skin disease After receiving a prescription from Manson he turned to leave, then suddenly started coughing, and calmly expectorated a huge gelatinous glob on the precious carpet Manson, greatly annoyed, was on the verge of pouring some strong Chinese invective on the ill-mannered boor when his keen eye spied minute rusty spots in the mucous mess In great excitement he got hold of a slide and rushed to the spot, kneeling down, he scooped up the sputum and immediately placed it under the microscope It was teeming with peculiar large ovaloid bodies which Manson at once recognized as the eggs of a worm, a *paragonimus* He had discovered the cause of endemic haemoptysis, a common and grave disease simulating phthysis in the Far East.

The laboratory work was taught at the School by the Superintendent, Dr. C. W. Daniels It consisted chiefly in staining blood films for the malaria parasites and the microfilariae The departments of protozoology, helminthology, mycology, and bacteriology were not yet in existence, clinical training was still given more importance than laboratory research

peculiar shape. It was a real monstrosity, with a large flattened dome and a huge peak in front, and attached at the back to the enormous brim, like a tail, was a long, broad red ribbon intended to protect the spine from the ultra violet rays of the sun My two colleagues never allowed me to wear that monumental headgear—they asserted it would make me and the whole Commission the laughing stock of Equatorial Africa, and that both the aborigines and the monkeys would throw coconuts at us

After I had got my tropical attire Low remarked in a casual way "You may have the chance of doing some big game shooting Don't forget to buy a good rifle at Holland & Holland You must have a weapon with plenty of stopping power, and of a bore no less than 400" It was all Greek to me. I knew nothing about shooting, although like every young man I had often dreamed of hunting lions and tigers

I went to Holland & Holland The assistant was engaged with other clients, but turned to me for a moment and asked me what I wanted I said "A rifle with plenty of stopping power and no less than 400 bore' He promised to attend to me as soon as he had finished, and suggested that meanwhile I should look round and inspect various rifles which were lying on several beautifully polished tables On a side-table I noticed much lighter weapons these, I thought to myself, are surely more suitable, for they can be carried with greater ease and comfort in a hot climate So as soon as the assistant was free and came towards me enquiringly, I pointed to a particular one, saying that that was the rifle I wanted He looked rather puzzled, but politely and without smiling replied "Sir, this is not the type of rifle usually requested for big game hunting, it is the gun used by farmers for shooting rabbits"

I then wisely left the choice of weapon to him

* * *

On May 1, 1902, Low, Christy, and I left London for Marseilles, and on May 3 we sailed from Marseilles in a large and comfortable P & O steamer When we reached Aden we boarded the boat which was to take us to Mombasa This boat held several records she was the oldest steamer in the Indian Ocean, and this was her last voyage before being sent to be

himself took me to the F O, and we went up to the office of the Permanent Under-Secretary After waiting a few minutes, the Great Man came out and called Sir Patrick into his sanctum The door was left ajar, so I could not help overhearing the conversation which went on inside First they started talking about some sporting event, then they talked about malaria, which, after the recent discoveries of Manson and Ross, had become a subject of great popular interest Finally they came down to the business of the expedition The Permanent Under Secretary said "Well, have you picked your man? I hope he isn't a newly wed, like the previous one, who hated leaving the domestic hearth"

"Much worse," answered Sir Patrick, "he is an alien—in fact, a Latin dago" But he said it in a laughing tone, and not disparagingly

"There are good and bad aliens," the other replied "Let me see him"

So I was called in I looked at the great man in trepidation, but I liked him immediately He was white-haired, fresh complexioned, and tall, with a kindly expression and a twinkling eye He said "Dr Manson tells me you know a lot about bugs"

"Not very much, sir, but I am interested in them"

After a few more questions he looked at me again, patted me gently on the shoulder, and said "Well, young man, I am going to send you to Uganda, alien or no alien

My happiness was unbounded

The next few days were crowded for I had to collect all the apparatus necessary for the laboratory we were going to equip in Africa Two days before the date fixed for our departure, Low enquired of me, "What about your tropical outfit? My mind in those days was always in the clouds, dreaming of microbes and diseases, and I answered with an enquiring glance

"My dear fellow," he said, "do you expect to march into tropical Africa in a frock-coat?" At that time every doctor, even those who were far from opulent, went about in a black frock coat and a top hat. In my case both items of attire were secondhand, somewhat dilapidated, and of a distinctly greenish hue I rushed to the tropical outfitters and bought two khaki suits, and was greatly attracted by a gigantic sun hat of a most

peculiar shape. It was a real monstrosity, with a large flattened dome and a huge peak in front, and attached at the back to the enormous brim, like a tail, was a long, broad red ribbon intended to protect the spine from the ultra-violet rays of the sun My two colleagues never allowed me to wear that monumental headgear—they asserted it would make me and the whole Commission the laughing stock of Equatorial Africa, and that both the aborigines and the monkeys would throw coconuts at us

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broken up and sold as scrap iron There were no cabins, no bathrooms, and no electric light The passengers slept in berths placed round the dining saloon For years she had been used chiefly for carrying goats and cattle from Aden to Mombasa—and also hardly less odoriferous Somali emigrants This time she had a full cargo of more than four hundred goats packed tightly over the decks

Soon after leaving harbour we met the monsoon blowing fiercely, and the ancient tub began pitching and rolling and creaking crazily Within a few minutes my two colleagues complained of a slight headache and retired to the saloon-*cum* dormitory A few minutes later I myself began to feel a slight headache which soon turned into a severe one, and had to rush into the saloon and lie on my back After a couple of hours I thought a whiff of fresh air might do me good, and went up on deck My nostrils were struck by the effluvia of four hundred Arabian goats, I staggered back to my berth and remained in a horizontal position for the rest of the journey Never in my life shall I forget that ghastly voyage

We were in Mombasa several days, making preparations for our trip to Lake Victoria and Uganda, and in this we were much helped by one of the officials who had been with Captain Lugard, the famous explorer who had opened up Uganda and other almost unknown African countries Each of us engaged a personal servant or 'boy', and we shared among us a cook—a wonderful Goanese cook In addition the Government gave us each ten porters for our luggage My personal servant or 'dressing boy' was called Umari, a fine, strapping Swahili who could talk a few words of broken English and also knew a few words of German and a little Italian, having been 'boy' to various masters in British and German East Africa and Italian Somaliland One day I asked him what he thought comparatively of the British, German, and Italian masters, how they had treated him and which he liked best. He replied "German masters, plenty beatings, no money, Italian masters, no beatings, no money, English masters, plenty beatings, plenty money Umari likes English masters best"

On June 10 we took the train to Nairobi The carriages were very comfortable, similar to those of the Indian railways with four seats which at night could be turned into *couchettes* There was no restaurant car in the train, and no buffets at any of the



Guma, my faithful servant, playing a native musical instrument

The Sleeping Sickness Commission's first abode in Entebbe

The author giving a clinical demonstration



e microscopic snake-like parasite causing parangi



The protozoan parasite causing sleeping sickness

stations, so we had to live on the provisions we had brought with us

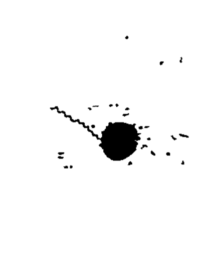
On June 18 we arrived at Nairobi, then hardly larger than a village The country surrounding it was inhabited by the Masai, the most famous of all African warriors. A number of them were at the station out of curiosity they wore tall feathers in their heads and their bodies were painted, they carried enormously long spears and oval shields In peace time the Masai were agriculturists, chiefly shepherds and herdsmen In the country a Masai would sometimes suddenly approach a cow and stab a vein in its neck, then he would cup his hands and collect and drink the blood, or more often let it drip into a vessel containing milk, and drink this most nutritious and powerful tonic mixture with great relish The country Masai had a peculiar habit of expressing their admiration for any animate or inanimate object they would spit at it. The first explorers were somewhat startled at being continually spat at by friendly chiefs—the friendlier they were, the more frequent and copious the salivary shots

Many chiefs were 'medicine men', expert in the treatment of war wounds, and well versed also in propitiating the 'Sky God' to promote abundant rain during the frequent cruel famine-producing droughts afflicting their country One of their religious beliefs was that the common people, and women of whatever social rank, had no future life the soul died with the body Only great chieftains would have a life in heaven after the grave, and would come back to earth from time to time in the form [illegible]

[illegible] their villages In our time the Masai had given up warring with other tribes and many had joined the police they made most excellent policemen

After stopping a few hours in Nairobi we took the train again for the then almost unknown terminus of the line—a place called Kikuyu The journey was interesting, and became exciting when, passing through the Nandi country in the depths of the night, we were woken by the sound of a bugle, and the train came to a standstill. We saw soldiers of the East African Rifles, with lanterns in their hands, who told us that the Nandi had risen in revolt. Fires were burning on the tops of all the surrounding mountains. A young N C O boarded our train He

The author giving a clinical demonstration



he microscopic snake-like parasite causing parangi



The protozoan parasite causing sleeping sickness

how he managed to prepare an excellent repast with the aid of only a few sticks of wood and a single pot. He was a Goanese half-caste and rather pale skinned, and, as he rode the mule and we were on foot, he was often taken for the head of our expedition by the gaping natives, and received obsequious homage from them, which he accepted with condescending dignity

After several days' marching we entered the Kaverando country The Kaverandos, one of the largest tribes of British East Africa around Lake Victoria, were gentle, agreeable, simple, and peaceable people. Both sexes smoked pipes Neither the men nor the women wore any clothes, but the women had a string of glass beads round the waist When a woman married her clothes would be increased, but only slightly a triangular or quadrangular piece of goatskin on the pubic region, and a tail attached behind to the string of the beads The tail, [illegible]

upon neck, chest, and arms, they were the millionaires of the tribe The shells were the currency of the country They were collected on the beaches of Mombasa and Zanzibar, and were despatched by caravan to all the regions surrounding Lake Victoria, the journey taking three to six months and their value increasing in transit the further the distance from the coast. These millionaires little knew that within a few months they would be paupers With the completion of the Uganda railway, the Indian rupee swiftly replaced the shells, whose value fell to nothing

It is well known all over Africa, and is related also in the books of the first explorers (Johnston and others), that the Kaverando people, despite their lack of clothing, were renowned for their chastity This was fully confirmed by a conversation I had with my boy, Umari, after some days' stay at Port Florence, where the little steamer on which we were to continue our journey was detained Umari was of a [illegible]

[illegible] of about the same size in Zanzibar

was rather pro Nandi, they often rose in rebellion, he said, but were not at all a bad lot and would soon be peaceful again The line had been cut ahead of us, and in the early hours of the morning a gang of Indian coolies arrived to repair it

After a while the train started moving very slowly, and continued at a snail's pace the whole day At night it was thought prudent to stop We expected to start off again in the early morning, but it was not to be—the driver informed us that during the night a rhinoceros had charged the engine, bending one of the outside pipes, and that it would take some hours to mend it Finally we arrived at a station called Bwolo There the kindly driver strongly advised us to telegraph the next station, a hundred miles further on, and ask the station master to prepare a meal for us In those days the so called station master, generally an Indian, was jack of all trades We took the advice and telegraphed The answer came back "Regret cannot get ready dinner Am shut up in telegraph office One lion roaming platform and two in compound"

This sounds very much like a traveller s tale, but it is true It is also true that occasionally lions would jump into the train, for this reason, as soon as it was dark, the doors and windows of the carriages were closed and bolted

After many hours we arrived at the station The lions had retreated and the station master, a diminutive Indian still very frightened and shaky, prepared a meal A few hours later we proceeded to the terminus at Kikuyu, and there we started marching

Marching in the African jungle is an extremely interesting but very exhausting experience, one can never do more than fifteen miles a day We used to start at five thirty in the morning and march till about eleven thirty or noon, sometimes we continued a few more miles in the evening from five to eight o'clock We marched through the so-called 'fly belt', where the tsetse fly (*Glossina morsitans*) fatally bites mules, donkeys and cattle, inoculating the dreaded tsetse fly disease nagana Exceptionally an animal would recover, it was then called 'salted', and fetched a very high price because it was no longer susceptible to the disease We bought one salted 'mule' which was in reality a long legged donkey, and unanimously decided to give it to our Goanese cook so that he would be fresh at the end of the march and able to cook dinner It was wonderful

shot two wild pigeons, which were cooked that night and proved the best item of the dinner

About noon the following day—July 11, 1902—we had our first view of Entebbe, a straggling conglomeration of grass-roofed huts Dr R V. Moffat, the principal medical officer, met us at the tiny pier and took us immediately to call on the Governor, Colonel Sadler, whose official title in those days was Commissioner He invited us to luncheon and dinner The Governor's house was not exactly palatial, but it did boast a tin roof, whereas all the others had roofs of dried grass it looked immensely grand by comparison Colonel Sadler was an agreeable quiet elderly gentleman and h

Aora nam tolo" (may you catch sleeping sickness)

Some time later, when I knew the Governor better, I remarked on one occasion "You must have a lot of worries with such a large indigenous population and so few Europeans" He replied "It's the few Europeans who cause me the headaches—not the thousands of natives"

Our abode was on a small hilltop not far from the shore, with a wonderful view of the lake Every afternoon we had the interesting spectacle of hundreds of crocodiles emerging from the water to enjoy their siesta, sleeping peacefully on the soft warm sand in the sun Occasionally I tried to shoot one of them, but invariably missed Indeed, my prowess as a big-game hunter is illustrated by the following story, which is, alas, true

I became extremely keen on big-game shooting, and often accompanied my two senior colleagues on shooting expeditions And I could not have had better tutors, they were both marvellous shots I, on the other hand, was a hopeless failure I never h

, and this is how it happened

The three of us, Low, Christy, and myself, decided one day to

But he was of an amorous disposition, and played the gallant with many ladies outside the legal circle. After a couple of days in the Kaverando country, he came to me and said: "Master, Umari very unhappy. Kaverando country no good. When are we going on?" The following night he again complained: "Master, Umari despondent and miserable. Why don't we cross to Uganda?" I asked him why he did not want to stay among the Kaverandos, and he replied: "Master, Kaverando ladies no clothes, nothing doing; Uganda ladies plenty clothes, plenty doing. Umari wishes go Uganda."

Port Florence on the map looked a big city, but in 1902 it was merely a group of huts and a few tents. Most of our luggage and stores had arrived by an Indian coolie-workers' train, and lay stacked in piles on the pier. The captain of the little steamer advanced to greet us. His face fell when he saw the mountain of cases.

During our stay at Port Florence rumours arrived that three days' march away to the southward an epidemic of some unknown disease had broken out among the natives; so, at the request of the Commissioner for the Kaverando district, Christy left with some porters to investigate and do what he could. Low and I embarked on the steamer.

We sailed at nine in the morning, travelling very slowly and stopping at night. The following morning the boat started off again, and from the muddy Kaverando Gulf we entered the clear waters of the lake proper.

We were about midway through the journey, and out of sight of land, when in the distance we suddenly saw some enormous black clouds obscuring the sun and moving towards us at great speed. The ship changed course to avoid them. We asked the captain if a severe storm was impending, and he told us that they were no ordinary clouds, but billions upon billions of flying ants. The insects were regarded by the natives as a culinary delicacy; they were squashed and made into a paste with the addition of some herbs, and were also used to make small cakes which were fried in fat.

After two days' navigation we neared an island, but did not land as the inhabitants were still very wild. I remember the tall trees near the shore covered with myriads of black sea-birds. We did land on another island, however, much to the terror of a few grass-skirted natives, who fled screaming. The captain

porters, and—most important of all—the 'salted' donkey carrying our provisions

After marching for three days, camping at night in a *zariba* with fires encircling our tent, we finally arrived in Kenya Colony, then known as British East Africa At first light we went into the open in search of the lion We didn't keep very close together—I should say we were about two hundred yards apart. Suddenly, in the distance, I saw something moving behind a large bush Full of ardour and enthusiasm, but somewhat short sighted, I presumed it was the lion, and fired The shot reverberated through the profound silence of the dawn A fearful commotion issued from behind the bush, but it was not the roar of the wounded monarch of the jungle which reached my ears—it was the terrified braying of an ass I had hit the donkey My two companions converged in the direction of the shrub Nobly they refrained from making any pointed remarks, and merely contented themselves with attending to the unfortunate animal's lacerated ear

A few days later, when we were back in Entebbe, Low said to me in a fatherly way "Castellani, you very nearly killed our 'salted' donkey—one of our most valuable possessions—and a few days ago on the lake you endangered the life of our best *shikari* and twenty paddlers, not counting your own After all, you're the bacteriologist of the Commission, and Christy and I are not bacteriologists If you're killed it will take us three months at least to get another one out from home Just think of the trouble all round, and the expense to the Government Take my advice my friend, give up big game shooting and stick to microbe hunting"

* * *

The two-roomed mud hut allotted to us was a dreadful place there was not a stick of furniture in it, and it was infested with termites When we first arrived in Entebbe, Low and I slept in the same room, as the other one was tumbling down The first night we placed our camp beds about three yards apart, and when we awoke [illegible]
night work of th[illegible]
fused to live in [illegible]
personally, I ha[illegible] tents—they get very hot.

have a holiday from the laboratory and hospital, and go hippopotamus hunting on Lake Victoria Each of us embarked in a canoe with his *shikari* and about twenty native rowers, whose paddles were heart-shaped and very short, and looked more like spoons than paddles My canoe slowly approached a group of peaceful-looking hippopotami in the shallow water near the shore One of them was a bit in front of the others, looking straight at us, and my *shikari* touched my arm, whispering "Aim at the forehead, Master" I aimed very carefully, and fired I can't conceive how it happened, but in the split second it took me to fire the brute must have turned, because it was not his spacious forehead that was hit, but the opposite pole, very close to the root of the tail The huge beast started moving around in circles with his short tail erect, causing a local storm in the shallow water The *shikari* looked preoccupied, and the native rowers terrified any moment they expected the canoe to be swamped or capsized The lake was infested with crocodiles, and large water snakes could be seen wriggling on the bottom

I didn't like the prospect myself, but fortunately a well aimed shot from Low's canoe killed the brute It slumped down with most of its body remaining visible above water, whereupon all three canoes converged upon it Some of the native rowers jumped on the beast while others went ashore and, by means of thick ropes of native grass dragged the dead hippo to land Within a few minutes hundreds of natives appeared running from every direction, some of them carrying large curved knives Clambering up the immense carcass they cut themselves great slices of thick skin, with its underlying fat and red flesh, as a European in the summer would cut himself a slice of watermelon For hours they went on gorging, singing and dancing, until finally they all fell asleep, then for twelve hours nothing could be done with them

I was told later that hippopotamus meat was considered a great delicacy, and that the real gourmet ate it with a mustard-like paste of fried ants, which adds extra piquancy

Not long after my exploit with the hippo, Low and Christy announced that they were going on a lion shooting expedition near the Kenya border I asked whether I could join them and they agreed, but, I noticed, with marked lack of warmth The expedition consisted of the three of us a *shikari*, half a dozen

Appalled by the condition of the hospital, Low and I approached the Government authorities with the object of getting two nurses from England At first our request met with violent opposition, but it was finally granted The Governor cabled to the Crown Agents in London to select two nurses, preferably from the retired list and neither to be less than fifty years of age [illegible] the fear that the [illegible]

. . . .

. . . . .

two ladies arrived, and their appearance certainly proved that the Crown Agents had followed the Governor's instructions to the letter However, all the precautions proved unsuccessful one of the ladies became engaged to a high Government functionary within twelve days of her arrival, and the other to a European surveyor within a month The first one, perhaps influenced by her fiance, a famous shot, became much interested in hippo shooting and this on occasion somewhat interfered with her nursing duties The ladies' fiancés, consumed by ardent love, deplored long engagements, and three months later there was a double wedding But the bridegrooms received no wedding gifts from the Government, instead, they had to reimburse the cost of their brides' passage from England to Uganda

* * *

When Umari my Mombasa boy, left me to go back to the Coast, Dr Christy had just returned from one of his distant expeditions and his porters were making a lot of noise in the *compound*—dancing wrestling and singing I was struck by the sight of one tall fellow with an immense smiling mouth and *big white* protruding teeth and something of the look of a faithful dog in his eyes He was playing happily on a native stringed instrument made from half a gourd

I told Christy that Umari had gone, and he suggested that I should choose another boy from one of his porters "But remember, *he said* "that they are ignorant fellows, and more like animals than human beings"

'I rather like the look of the one who is playing the gourd instrument outside,' I remarked, but Christy countered "I don't advise you to take him—he comes from Toro, and belongs to a cannibal tribe '

Building and organizing the hospital and laboratory was a hard job We worked like Trojans twelve hours a day, sweating and cursing With the sympathetic help of Dr Moffat we soon succeeded in fitting up a small infirmary for the sleeping sickness patients, with a laboratory attached The latter was a hut divided by mats into two compartments, one where we did the actual microscopical work and kept the incubator (brought from London and worked on kerosene oil), and the other where I prepared the culture media

An Indian medical assistant was given to us He was not fully qualified and was, in fact, a very ignorant fellow, but like most ignorant people he was convinced that he knew a tremendous lot He was useless in the laboratory, and after the first two days we sent him packing, since he was also useless in the wards 'Wards' is really too grandiose a word to describe the two black holes used for the patients—one for the men and the other for the women The attendants also were hopeless they were country natives and quite untrained, and totally callous about the sufferings of the patients, which made my blood boil Some they nearly starved, and one or two they beat, when one boy cried while I performed a lumbar puncture on him, they roared with laughter Relatives seldom visited the patients, and when they did showed no affection, sympathy, or pity. Only on one occasion did I come across an example of tenderness A little boy of about nine was in the very last stages of sleeping sickness, his mother and sister came daily and nursed him as best they could, bringing him milk and bananas They knew he was afflicted with the dread disease and that there was no hope, and they also knew that on the patient's death there would be a post mortem examination They were Roman Catholics, and when the little boy died they rushed to the Catholic church and begged one of the Fathers to give them a letter asking us to depart for once from the rule and not make an autopsy Out of pity we acquiesced We watched the weeping mother and sister place a large roll of bark-cloth on the floor of the ward—the bark of a fig tree, the *mubugo*, which when beaten with a wooden mallet, becomes pliable, soft and smooth They rolled yards of it around the body of the dead child, the corpse was then slung on a pole and carried on the shoulders of two porters, and the funeral procession proceeded to the Catholic cemetery

'Oh, on a festive occasion he goes to the forest and kills a monkey with his bow and arrows, and cooks it, but he complains that monkey's flesh can't be compared with the real article."

Three years later, while I was Director of the Ceylon Bacteriological Institute, I received a letter from an old Uganda friend giving me the news of Giuma's death the poor boy had died of sleeping sickness contracted during experiments carried out in the Entebbe laboratory It was a deep grief to me

If perchance the reader is a medical man, he may have come across a *Bacillus guma* in bacteriological books Few people know the origin of that name. I gave it to a new bacillus I had just found in Ceylon, to honour the memory of my faithful African servant and friend.

* * *

In my time there was no ice to be had in Entebbe or any other part of Uganda, and it was a job to prepare and conserve media in the laboratory, owing to the intense heat, everything became contaminated In August, with the Government authorities approval, I ordered from home a small ice-producing machine which arrived in December With much trouble I succeeded in making it work, and a few tiny squares of ice were produced. I sent the first two bits to the Governor by a running-boy Never before had anyone tasted an iced drink in Uganda The Governor was most enthusiastic. Many officials suddenly became keenly interested in the research work carried out in the laboratory, and paid impromptu visits to it with whisky bottles in the capacious pockets of their khaki jackets Unfortunately the ice producing machine was very small and its output feeble, and I needed the ice for my microbes

The astonishment of the native attendants and boys at seeing water turned into a solid was great, none of them had ever seen ice or snow One, coming from a far-off district in Unyoro, had perceived in the distance the white peaks of the mighty Ruwenzori but he, like all the other natives, believed them to be gigantic heaps of salt.

* * *

"Well," said I, "he looks intelligent and seems to be of a happy disposition I'll risk his being a cannibal—I'm pretty tough"

So Giuma was called and asked if he would enter my service, and whether he would be willing to train as a domestic servant The conversation was chiefly by gestures, although Christy knew a few words of their lingo He seemed to be delighted, and the same day became a member of the household

Giuma soon proved to be the best servant I ever had He was so intelligent that a bright idea occurred to me I would train him as a laboratory assistant to take the place of the ignorant, oily, useless Indian So Giuma started work in the laboratory, and was soon proficient But he did not become proud, and insisted on continuing his domestic duties in the house he would come very early in the morning to superintend the cleaning and sweeping, and again in the evening to serve dinner, and after we had gone to bed he would mend our clothes, at which task he excelled

On the rare occasions when we gave a so-called dinner party to repay in a small way the most generous hospitality showered upon us by everyone in Entebbe, he would act as our major domo He looked magnificent in a long, fuschia coloured, toga-like garment which he had bought in the market—certainly the discarded dressing gown of a European lady in Mombasa or Zanzibar which had acquired great value in the long journey from the coast On his head was a tall monumental scarlet turbasch borrowed from a corporal friend of his in the police force

Giuma picked up English fairly well and very quickly and we had long conversations on the most diverse subjects Once I remarked "Malicious tongues say you are a cannibal Is it true?"

"No, sir," he replied with emphasis

"Was your father a cannibal?"

"Yes, sir, but a long time ago Eating human flesh is no longer legal since the white people have come to our country"

"But have you never tasted human flesh?" I queried

"Well sir, when I was a little boy my father used occasionally to give me a tiny morsel of it if I had rendered him some small service"

"And how does your father manage now that cannibalism is forbidden?"

I did so and his expression did not strike me as that of a sleeping sickness patient. The eyes were wide open and the pupils dilated as in terror. I ran my fingers over his neck; there were no enlarged glands as present in sleeping sickness. I palpated the abdomen and found the spleen enormously enlarged and hard—as in malaria. I took a blood film from his finger. His hands were shaking, but it was not the fine tremor of sleeping sickness, but more the trembling of a man in mortal fear. Further, I extracted the information that the disease had started with very high fever and shivering fits recurring, at first, every third day. I felt convinced that it was not sleeping sickness at all but an atypical form of malaria, which may simulate any number of other diseases, including, though exceptionally, sleeping sickness. Christy concurred with my diagnosis, so, with Giuma continuing to act as interpreter, I addressed the leaders of the procession.

"My friends, your Chief is not suffering from n'Tolo. Do you see these red pills?"—and I showed them a bottle of red quinine sulphate tablets. "Give him one red pill four times a day for two weeks, and he will get well."

After some persuasion my bottle of pills was accepted, and the procession turned back. I shall never forget the transformation from mortal terror to hope in the Chief's expression as his palanquin turned and took the opposite direction.

For many weeks Christy penetrated further and further into unexplored regions, while I went back to Entebbe, to the hospital and laboratory, accompanied by Giuma and half-a-dozen porters. I stained the blood films I had taken from the Chief, and found them teeming with malaria parasites.

About three months later I was busy in the laboratory at Entebbe when Giuma suddenly ran up to me excitedly. "Master, there is a messenger outside. He says he is a Royal Messenger and has a message for you from his King."

He was a tall, powerfully built Negro, his skin, like polished bronze, covered with rivulets of perspiration; he wore a grass skirt—not at all royal—round his loins, reaching to his knees. He was loaded with large bunches of luscious [illegible]

[illegible] of twisted native grasses.

He addressed me thus: "Sir, these gifts are for you, Great

We made many journeys during this period On one occasion Dr Christy and I were marching through an outlandish district with Giuma and, followed by a long line of porters, were heading towards the Kingdom of Toro, where Giuma had been born Christy was interested in the geographical distribution of sleeping sickness

We were making our way through the thick forest when we suddenly came upon a clearing, in the centre of which we were horrified to see heaps of naked black figures on the ground Some movement was perceptible among the heaps, and one or two figures managed to crawl out They were the victims of sleeping sickness, brought there from the surrounding villages The dread of the disease was such that, if anyone showed symptoms of it, the other villagers would immediately carry him out into the forest and abandon him there, to die unattended Occasionally a few bunches of bananas were left with the miserable wretch, but he could hardly reach them, and no more food was ever brought to him

Leaving some of our provisions with the poor, starved creatures, and saddened at not being able to do more, we proceeded into the thick of the forest After perhaps an hour's march, we heard in the distance a muffled, melancholy sound of tom-toms, and in the next open space we saw a long procession of weeping natives In their midst, carried on a sort of palanquin, was a youngish man in white, looking, I thought terribly frightened

We approached the procession, and with Giuma as interpreter, made enquiries The young man on the palanquin we were told, was the chief of a large neighbouring village who had contracted the evil disease *n Tolo*, or sleeping sickness His subjects noticed that he had become thin and feverish and was overcome by sleep, especially during a palaver The elders of the village unanimously decided to apply to him the rule he had himself decreed to prevent the spread of the epidemic *transportation and isolation in the forest*

"We are inconsolable," they said "at having to do this He was a good and just chief We are however carrying him to the forest with all honours due to his rank "

Christy turned to me, since I was the clinician as well as the bacteriologist of the expedition, and said You had better have a look at the fellow

of local kings and chieftains, of whom there were large numbers They treated them the same as any other natives, with scant consideration Europeans expected to be saluted by them, instead of the other way round They used to call the great chief and Prime Minister, or Katikiro, by his first name, Apolo, and expected him to greet them Some years later he was knighted and became Sir Apolo, but Europeans continued to treat him in a most familiar way

We entered the Minister's dwelling, a spacious, clean, well-kept hut. He had just returned from a visit to England, and had installed an electric bell on the door of the hut, and of this he was inordinately proud When we entered his presence he rose [illegible]

face not very expressive At that time he was about forty or forty five years of age He was clothed in a long white cassock-like robe reaching to the ground, and wore sandals, although in those days every Baganda, whatever his position, went barefoot. With Dr Cook acting as interpreter, we had a long conversation

"Did you like London?" we asked

"Yes, very much"

"What struck you most in London?"

"The police," he answered "How can a single man stop the enormous flow of traffic merely by lifting his hand?"

The second thing that struck him was the electric light, and, third, the iron and steel men-o'-war at Plymouth How can iron float?

The Katikiro was very amiable, I asked if I might take a photograph of him "With pleasure," he replied "but first [illegible]

I was told that many of the so-called State robes sported by the lesser chieftains were in reality discarded European garments imported from the coast, the most appreciated being ladies' old red flannel dressing gowns

After this visit, Dr Cook took us to the royal palace, a conglomeration of huts surrounded by a tall palisade Entering the

Anti-Devil White Man You drove out the Evil Spirit from my King's body in the forest You gave him some red pills which have been miraculous He was cured in nine days Furthermore, they gave him prodigious energy and vigour He has married, sir, and several bridal huts have been added to his kraal"

"But wasn't he already married when I saw him?"

"Oh, yes," replied the messenger, putting up both hands and stretching out all ten fingers to indicate that the Chief had had ten wives

"And now?" I enquired Up went both hands, with all ten fingers stretched out three times The Chief had at present thirty wives The messenger concluded "The King was delighted with the result of the treatment, and requests you to send him another bottle of red pills"

* * *

Another journey was made in October, when Low and I decided to pay a visit to Kampala the native capital, principally to discuss medical matters with the brothers Cook, two famous missionary doctors The distance from Entebbe to Kampala is only about thirty miles but it seemed never ending in the appalling heat, and after six hours on the old road we lay down exhausted We could not find water and the porters marching at a slower pace, were several miles behind us

In Kampala one of the Cook brothers A R Cook took us to see the Prime Minister (Katikiro) about whom everyone was talking He was not of chieftain blood but a peasant boy adopted by a courtier in the entourage of Mwanga before that king was deposed He received the name of Apolo Cagwa and, being a very intelligent young man rose until he was finally given a chieftainship It was said that King Mwanga did not like him much, as rumours had come to his ears that he disapproved of the king's harsh rule and he was often beaten In those days a mere whim of the king's could mean torture and death to his subjects It was not at all rare to meet natives in Uganda whose hands had been chopped off or one or both ears severed Mwanga was a most cruel man a degenerate debauchee, and an abject physical coward

In my day the few Europeans in Uganda thought very little

tattooed and did not dye or grease their bodies. Politically they had lived for hundreds of years under a feudal system. They never developed a written language until the missionaries created it, but preserved the history of their ancient dynasty by verbal tradition, and knew the names of thirty of their kings, probably dating back to the fourteenth century.

* * *

There were constant thunderstorms during the month of December 1902, and it was appallingly hot and muggy. I passed many sleepless nights in my small, uncomfortable camp bed with its suffocating mosquito net, which prevented the air from circulating. Lying awake, I could hear the buzzing of myriads of insects. In the middle of the room was a rickety table on which stood a kerosene lamp always kept partially lit, and by the light of this I could see all sorts of moths, mosquitoes, and midges flying about. Worse still were the gigantic spiders crawling on the floor—which was simply *beaten earth*—and over the table.

One night a calamity occurred—a hole in my mosquito net! Every kind of insect got in, and I was horribly bitten. For a while I scratched like a madman, then could not find the strength even to scratch, and lay like one dead. Finally, as sleep was [illegible] went to the hospital [illegible] was ghastly: two big [illegible]rosene lamp between them, a few tottering figures shuffling about in the dark—patients who had got out of bed, the death rattle of those who were breathing their last. It was a scene from Dante's *Inferno*. I lit a second lamp and gave some milk to two or three poor wretches who were crying for food: the night attendants *had* disappeared.

I worked the whole of Christmas Day preparing broth and other media for my microbes (as apart from sleeping sickness I was interested in intestinal and skin diseases). On Christmas Eve the butcher had announced that he would kill an ox, so I was able to get some really good meat. Previously he had only been able to supply me with goat's meat, which made very poor broth for bacteria.

During the first few months of research I had felt like a man

gate we found ourselves in an enormous quadrangle, which was kept perfectly clean and bare—not even a blade of grass was allowed to grow on it. We were saluted by a large guard of honour, armed with spears, and by tumultuous music on tom-toms. We passed into a sort of courtyard, which opened into another, and then again into a third, and so on until we must have passed through six or seven, all bordered with huts. In the last one, on the left, we saw what looked very much like a little theatre, and there, on a slightly raised dais, sat a coal-black boy about nine years old—the boy king, the Kabaka (the title means Monarch of Monarchs). He was dressed in white, and in his right hand he held the royal 'sceptre', in reality a walking stick with a silver knob which had been presented to him by a visiting European. His chair was placed on a small square carpet, and woe betide anyone who trod on it in the old days it meant instantaneous beheading Dr Cook knelt at a slight distance (Europeans criticized him for showing too much obsequiousness to a small native king) The Kabaka gave us his warm little hand and said he was very pleased to see us Behind him, in a place of honour but at a certain distance, squatted a middle-aged Baganda woman, she had been his wet nurse, and for this she would be honoured for the rest of her life. The Kabaka allowed me to take a photograph of him, but the great trouble was the carpet I was scared of treading on it

The boy king, placed on the throne after the deposition of Mwanga, had been taught by missionaries and brought up as an Anglican, his playmates were missionary boys He was a good student, and could read and write quite well Under European rule all Baganda became very keen on learning and as a matter of fact even before the European advent they had a natural disposition for it It is recounted that all the chiefs who met Captain Lugard on his first visit to Uganda begged him to give them books, though none of them could read

In ancient times the Baganda were a war-like people with powerful armies on land, and fleets of canoes on Lake Victoria by means of which they conquered many of the islands In my time, however, they certainly did not look war like they were a weak race, and full of disease They have improved greatly during the last few decades under the wise and benevolent rule of the British. In some ways they were, at the time of our visit, further advanced than other African tribes for they were not

had discovered trypanosomes in the cerebro-spinal fluid in five out of fifteen cases of sleeping sickness Dr Castellani remained in Entebbe for three weeks after the arrival of the new Commission, and during this time he examined twenty-nine further cases for trypanosomes, with the result that seventy per cent were found to contain these parasites"

Both then and subsequently, Dr Nabarro unselfishly fought for acknowledgment of the truth In a letter published in *The Times* of July 23, 1908, he wrote

> "In conclusion, to Dr Castellani must be given the credit of having first found the trypanosome in the cerebro-spinal fluid of sleeping sickness patients, of having first associated the parasite with the aetiology of the disease, and of having first published that sleeping sickness is a trypanosome infection"

In a further letter, published in the *British Medical Journal* of October 6, 1917, he re-emphasized

> "In all my publications, as a matter of mere justice, I have always given the credit to Castellani (1) of having first discovered the trypanosome in the cerebro-spinal fluid of sleeping sickness patients, (2) of having connected the trypanosome he discovered in the cerebro-spinal fluid with the aetiology of the disease"

I shall always feel deep respect and admiration for his firm stand in this matter, and, too, for that of Sir Ronald Ross, who wrote in the *Journal of Tropical Medicine and Hygiene*, October 1, 1906

> 'There cannot be any doubt that the fundamental discovery in the elucidation of the aetiology of sleeping sickness was Castellani's observations of trypanosomes in the spinal fluid of sleeping sickness patients.'

In December 1902, Dr Low and Dr Christy left Uganda Low had been appointed Lecturer at the London School of Tropical Medicine Soon afterwards the first English judge arrived. He was a tall, spare, youngish man [illegible]

[illegible] native was walking in front of the

groping in the dark. Occasionally a momentary gleam of light would appear, like some tantalizing will o' the wisp, always to disappear as I pursued it.

There were many theories about the cause of sleeping sickness. At first we all accepted Manson's that it was due to a filarial worm, then known as *Filaria perstans*, and now rejoicing in the high-sounding name of *Acanthocheilonema perstans*. But Low and Christy found that the geographical distribution of the malady and that of filaria did not coincide: in some districts there was no filaria, but cases of sleeping sickness abounded, and vice versa. That theory was therefore abandoned. Many other hypotheses came under discussion: the malarial, the helminthic (*Ancylostoma duodenale*), and the nutritional (the terms 'vitamin' and 'avitaminosis' had not yet been coined). The most likely theory seemed to be the bacterial one, as in numerous cases, post-mortem and also sometimes during life, streptococci were present.

On November 12, while examining the cerebrospinal fluid of a boy affected with the sickness, my eye had been attracted by a little fish-like parasite darting about. It was a trypanosome, and in the following months I observed it in several other cases. I had found the real causative agent of the disease.

In March 1903 the second Sleeping Sickness Commission, composed of two members—Colonel David Bruce and Dr. David Nabarro—arrived. They confirmed and greatly enlarged my researches, and, moreover, proved that the disease, as suggested by Sambon, Brumpt, and myself, was carried by a tsetse fly (*Glossina palpalis*).

I wrote an account of my discovery for the Royal Society,* and Colonel Bruce, in his first report to the Society ("Progress Report on Sleeping Sickness in Uganda" by Lt. Col. David Bruce, F.R.S., R.A.M.C., and David Nabarro, M.D.) confirmed my findings:

"The Commission arrived in Entebbe, Uganda, on March 16, 1903, and were met by Dr. Castellani, a member of the Sleeping Sickness Commission sent out by the Royal Society in May 1902. Dr. Castellani informed us of the work he had done, one especially interesting observation being that he

* *Presence of Trypanosoma in Sleeping Sickness*. Proc. Roy. Soc. 1903, vol. 71, p. 501.

Two months later I received the official communication from the Colonial Office that I had been appointed Professor in the Medical College of Colombo and Director of the Bacteriological Institute

I left London for Ceylon in December In those days the passage was paid for by the Colonial Office, and one could travel either second-class by the famous P & O Line or first-class on any other line I went by a Japanese passenger ship, which was very clean but very slow Most of the officers were Europeans the captain was an Englishman, the first officer a Swede, and the engineer, of course, a Scotsman

courthouse (a large thatched hut) with another native who had just arrived from a distant country district. On seeing the judge emerging from it, he said to his companion: "Do you see that tall white man? He is the English judge. His skin is white, but his heart is black."

On April 5, 1903, it was my turn to leave. A sad goodbye to poor Giuma at the laboratory, for up till the last minute he had hoped to come with me.

From the deck of the little steamer moving off the pier, I perceived him behind the group of doctors who had come to wish me God-speed. I can see him now his coal-black, disconsolate face, his tearful eyes, his enormous mouth for once not opened in a huge grin It was the last I ever saw of my faithful servant.

In the late evening of April 7, the boat entered the Kaverando Gulf and anchored for the night The following morning we reached Port Florence What a difference in ten months! No more thatched huts, but plenty of small buildings with corrugated-iron roofs

The clothes of the men and women had also changed a great deal Most of the men wore a sort of long white chemise covered with some hideous pieces of European clothing—an old jacket, a tail-coat, or the like, most of the women wore bright cotton garments of various patterns In the market-place only a few men and women from distant districts could be seen in the traditional fashion of complete nakedness

The journey home was uneventful On the way I visited Professor Kruse in Bonn, and had some long and interesting talks in his laboratory. Two days later I arrived in London—at last

My first call was on Dr Patrick Manson, who, as usual, was extremely kind to me I remained in London for a few weeks, doing some work at the Lister Institute—in those days it was called the Jenner Institute—and at the School of Tropical Medicine. Dr Manson gave me some very good news the Colonial Office would probably offer me an appointment in the Ceylon Medical Service before the end of the year

In July, both Manson and Ross insisted on my having a holiday—one of the few holidays in my life—and I went first to Florence to see my beloved mother, and then to Montepiano to see my father In September I returned to London, and continued my work at the Lister Institute and the School of Tropical Medicine.

on the island "A race fair of skin and comely withal, they don jackets and hats of iron, rest not a minute in one place but continuously walk here and there, they eat hunks of stone [bread] and drink blood [wine] They give two or three pieces of gold and silver for one fish or one lime" After 150 years the Portuguese were succeeded by the Dutch, whose rule lasted from 1658 to 1796, and the Dutch by the British Ceylon became independent again in 1948, after more than four centuries of foreign domination it remained, however, within the British Commonwealth

Ceylon is approximately the size of Scotland, and has a population nearing nine million It is inhabited by two principal races the Sinhalese (over six million) and the Tamils (over two million), an Indian race The Sinhalese are very intelligent and quick tempered, the Tamils are slower of mind but very steady and hard workers, and crime among them, especially *crime passionel*, is rare The Sinhalese as a race are lean and of medium height, and have refined Caucasian features The men of the popular classes wear their hair long (at least, they did in my time), made up in a knot at the top of the head and held in place by a semi-circular tortoise-shell comb, and as they clothe themselves in a long, white, one-piece tunic which clings to their slim bodies, have a very scanty growth of hair on their faces, and possess rather an elegant bearing, they are often mistaken for young women by shore leave European sailors—which may lead occasionally to complications

Sinhalese girls are renowned for their beauty they are slender and graceful, with chiselled features and luminous dark eyes and their complexion is hardly darker than that of southern Europeans The charming oval face is often speckled with the famous golden beauty spots praised in song by ancient and modern Sinhalese bards as *gomera*, which means drops or tears of liquid gold Incidentally, I may say that my investigating mania led me to take scrapings from these spots and examine them microscopically they were colonies of a fungus! My enthusiastic announcement of this fact was received coldly in Sinhalese literary and poetic circles

In addition to the Sinhalese and the Tamils there are the Burghers, descendants of the old Dutch settlers The term 'burgher' has, in practice, been extended to cover Eurasians in general, descendants of the Portuguese and other Europeans

CHAPTER IV

CEYLON

I WAS IN CEYLON from 1903 until 1915—the happiest years of my life.

Ceylon is the most beautiful place in the world, far more beautiful than any of the Hawaii islands or the Antilles. Who can ever forget the first sight of the Island in the warm early *morning* when a gentle breeze from its shores, laden with delicious spicy perfumes, softly strikes the bows of the slowly advancing boat? Glorious *Lanka*, the Pearl of the East, emerging from the foam of the deep-blue sea like Aphrodite of Ancient Greece.

Graceful, tall, and slender coconut trees fringe the coast, rubber forests cover the slopes of the hills, and the sides of the high mountains are enveloped by a diffuse emerald-green mantle of tea-bush vegetation

A certain well-known hymn, written by Bishop Heber in 1819, states that in Ceylon "Every prospect pleases, and only man is vile". I do not agree with the latter part of the eminent cleric's statement the Sinhalese are not morally inferior to the inhabitants of other countries—in fact, they are far better than most.

Ceylon has a very old and epic history it was an independent country for two thousand years, until the Portuguese landed and conquered part of it at the beginning of the sixteenth century In 1505 Dom Lourence de Almeida, son of the first Portuguese Viceroy of India, sailed with a squadron from Cochin with the object of intercepting a fleet of Muslim ships coming from China and bound for the Persian Gulf, laden with rare and valuable merchandise. He ran into a sudden, very heavy storm and his ships were carried by the sea and the winds to the southern coast of Ceylon He took refuge for a few days in the port of Galle, and then proceeded with his fleet to Colombo It was the first time the Sinhalese had seen Europeans, and in the old Sinhalese chronicles, *The Rajavaliya*, one finds the following description of the Portuguese soldiers and sailors who landed

journeys I used to take with me the garden coolie to do the 'cranking' (in those days cars did not have electric starters). The coolie slept peacefully in the back of the car, and I called him when his services were required.

I never had dinner before 11.30 or midnight, and my lunch consisted of a couple of sandwiches at the Bacteriological Institute, as I was loath to interrupt my experiments there at midday. Although my heart was in research work, I liked private practice carried out in a scientific manner with all the necessary laboratory examinations: it enabled me to observe, and later describe, a number of minor diseases which I could never have seen in hospital.

My practice received a very perceptible fillip when, only a few months after my arrival, I was summoned to Queen's House, the Governor's residence—though I had merely been called to see Her Excellency's cats! Lady Blake was the daughter of Sir Bernall Osborne, the great friend of Edward VII. She was extremely fond of cats, and had about two dozen of them roaming all over the house, some of them very valuable. One day one of the cats suddenly died, two days later another; and the following day three more a true epidemic. H.E. was almost out of her wits, and insisted to the veterinary surgeon that a second opinion should be sought. The vet called me in to examine the animals and investigate their illness. When I arrived at Queen's House, apart from the five cats already departed two more were extremely ill. It was decided to take them to the Bacteriological Institute, where the poor little brutes died a few minutes after arrival A post-mortem examination was immediately held, and a thorough [illegible] investigation carri[illegible] both from the hea[illegible] organism of the h[illegible] septicaemia group which later, in my official report, I described with the name of *Bacillus felisepticus* (producing sepsis or blood poisoning in cats). I prepared a vaccine and inoculated the surviving cats (two more had died in the meantime), and no further cases occurred. Lady Blake was very grateful to me—so grateful, in fact, that soon after, having caught a bad cold on a visit to Nuwara Eliya, she called me to see her professionally. A few weeks later a much more important event occurred.

One of the Kandyan Chiefs—they were famous for their

who married native women In a certain quarter of Colombo Portuguese is still spoken—or was when I was there There are also the Moormen, who are of Arabian stock and are all Mohammedans and usually traders, and there are the Malays, most of them policemen There is a sprinkling of Parsees, who came originally from Persia and are followers of Zoroaster they are generally very obese, and dress in voluminous, almost transparent cotton clothes, through which the amplitude of their curves can easily be perceived They are mostly merchants—often wealthy: they enjoy a tradition of strict honesty, and in my day were often chosen by the banks as cashiers An occasional tall, thin Afghan with the peculiar costume and headgear of his mountain country is to be seen, and also a very occasional Punjabi or Pathan The Afghans are petty money-lenders, and are much disliked Chinese are rare, Japanese rarer, and Negroes are never seen If you want to have an idea of the mosaic of races making up the population of Ceylon, pay a visit to the Pettah, a sort of bazaar quarter of Colombo a huge crowd is always to be found there, and in it you will see all the types I have mentioned

The Sinhalese are Buddhists, and Buddhist monks are often seen walking in couples along the roads, their heads shaven, clothed in orange-yellow winding robes, and carrying a small orange-yellow parasol

My life in Ceylon was a full one I was Professor of Tropical Medicine and Lecturer on Dermatology (and at one time Professor of Pathology) in the Medical College, Director of the Government Bacteriological Institute for the whole island; Director of the Colombo Clinic for Tropical Diseases, and Physician to the Seamen's Ward of the Colombo General Hospital

In addition I was allowed private practice I think I can honestly say that I never let my private work interfere with my official duties my consulting hours were six to eight in the morning and eight to ten at night Notwithstanding the unusual hours, I was lucky from the very beginning, and quite a number of patients came to consult me After 10 p m I would go and see patients at their homes Not infrequently I was called for consultation out of Colombo, which took me the whole night I had great difficulty in finding drivers—they disliked the hard work at night—so I drove myself, but on long

which I collected on a slide I put a cover glass on it and examined the fresh blood under my portable microscope it was teeming with malaria parasites

With the help of the attendants the bulky body of the Chief was gently turned over, and I stabbed fifteen grains of quinine (a huge injection) into each of his two mountainous gluteal protuberances Within three hours he revived, and the next day he was clamouring for his rice and curry A most miraculous resurrection

The rumour soon spread that where the devil dancers had failed I had succeeded, and my reputation increased tremendously—and so did my practice

Apart from the unusual consulting hours, my method of practice had another peculiarity I never charged any fees, and I never sent any bills This got me into trouble once with a Maharaja who had come from India especially to see me and whom I treated for a couple of weeks He sent me a cheque for twenty thousand rupees, and I returned it, replying in respectful terms that his debt to me was 150 rupees His secretary told me later that the Maharaja was at first greatly annoyed but [illegible]

[illegible] days I adhered firmly to the old, trite saying that a doctor should be like a priest and not expect financial remuneration My ways had to be modified later after marrying and having a family, but not very much. Luckily the great majority of my patients have been honest and generous towards me, otherwise I should be a pauper in my old age

* * *

In my Ceylon practice I came across many absorbing cases and got to know many interesting and famous people

In 1904 the Empress Eugenie, widow of Napoleon III, the famous Empress who had been both adored and hated by the French populace, paid a visit to Ceylon and remained there several weeks, staying at the Galle Face Hotel, where I was called to see her a few times for a minor complaint She was then a very old lady, but still erect, tall and good looking, with

wealth and their voluminous official robes, which traditionally had to bulge most prominently (with padding if necessary) in correspondence with their abdominal region—became very ill The district doctor was called in No improvement after three days of his ministrations, so he received his *congé*, and the *vederallas* were asked to take charge The *vederallas* were illiterate native practitioners who had never attended a medical school, or any school, and had learnt their art from their fathers Their efforts had no success, and the patient's condition became worse and worse As a last hope the family then summoned the 'Devil Dancers' Three dozen of them came, wild half naked men wearing huge, terrifying masks In relays they danced frantically for two days and two nights in front of the house, making the most fearful bodily contortions, crouching on the ground and suddenly leaping into the air, shouting, shrieking, and singing to the violent accompaniment of numerous tom-toms All this with the object of frightening the *killa* (evil spirit) which had entered the body of the Chief, and making it flee The evil spirit, however, refused to budge, on the contrary, it penetrated deeper and deeper The patient appeared to be at his last gasp The devil dancers were dismissed, and preparations were then started for a grand funeral befitting the high position of the *moriturus*

It was then that one of the garden coolies respectfully approached the lady of the house, and humbly suggested that a young *frango* (foreign) doctor recently arrived in Ceylon might be called in, the doctor had cured him of an ulcer of the leg which had lasted for three years The distressed lady who expected to become a widow at any moment and deeply regretted the fact, as her husband had always been of a kind and affectionate disposition was all in favour of the garden coolie's suggestion, but her entourage ridiculed the idea What could an unknown foreign doctor do where the devil dancers had failed?

However, a car was sent to fetch me and I saw the patient He certainly appeared *in extremis*—he was unconscious his skin covered with a cold, clammy sweat his pulse almost imperceptible But something in his appearance struck me it might be an atypical form of malaria although his temperature was below normal With a pin I pricked the cold wrinkled bluish tip of his forefinger, and a droplet of dark blood slowly exuded,

in perfect health. Leaving the room, I was met in the corridor by the anxious Buddhist leaders of the weeping crowd outside, apprehensively waiting to hear my verdict. With deep compunction I informed them that there was every hope for the Holy Man's complete and speedy recovery.

I was called in to see the bishop in a nursing home when he became seriously ill with bronchopneumonia on a visit to Ceylon. He was an ascetic and a strict teetotaller. In those days the chief remedy for bronchopneumonia was brandy, and I carefully instructed the nurse to give him half an ounce every three hours A bottle of brandy was consequently placed on a low wooden stool at the foot of the bed.

The following day, when I went to see the patient, I found him no better. I noticed that the bottle was still full. The nurse informed me that she had done her best to persuade him to take the brandy, but he had flatly refused; it was contrary to his teetotal principles

The Bishop was semi-conscious and his eyes were half closed, but he could hear quite well and understand perfectly what was said to him.

"Your Grace," I said, "it is my duty to inform you that you are dangerously ill Your Grace has to make a decision: either you want to go to Paradise"—and I pointed up to the ceiling—"in which case *don't* take the brandy, or you want to remain in this wicked world"—and I pointed down to the bottle. A tremulous hand came from underneath the white sheet, and pointed d[illegible]

[illegible] English one, the old B I. (British India), and a foreign one The boats of the first had the reputation of being strongly built and very seaworthy, and their engines never gave trouble. But the food on board was execrable, and in addition the bar was closed punctually at 11 p.m. The boats of the second line, on the other hand, enjoyed a very poor nautical reputation and their engines were liable to break down suddenly, but the food was delicious and had become famous all over the Far East. Moreover, the bar was open all night

I noticed that, when I asked my friends which line they were taking to India, the reply during the calm, inter-monsoon season

something uniquely refined and elegant about her—a fascinating personality.

A few years later the German Crown Prince came to Ceylon on a big-game shooting expedition. He did not make himself very popular, even among the German colony, which was then large and influential and possessed a trade *élite* headed by the Freudenburg family, who were patients of mine. The members of this family were all very able and indefatigable workers, and also very kind and generous. The war ruined them completely. Had the Germans continued their patient, peaceful penetration instead of going to war, they would have become commercial masters of Ceylon (and many another British colony). In 1913 nearly half the trade of the Island was in their hands.

During these years quite a number of German princelings came to visit Ceylon, and I looked after several of them professionally. They usually travelled in style, surrounded by a small court. I noticed that the smaller the state they ruled, the larger their retinue and the more pompous their Lord Chamberlain.

Among other visitors I treated were a famous American religious leader and a bishop.

The American was a member of a philosophical religious sect very akin to Buddhism and Theosophy, and he was visiting Colombo to discuss religious matters with the high priests and leaders of Buddhism in Ceylon. He gave innumerable lectures and open air talks, all of them most successful. Suddenly the rumour spread that he had fallen ill, and I was asked by some of his native admirers to go and see him. I proceeded to the Galle Face Hotel, where he was staying. The place was surrounded by crowds of kneeling devotees, weeping and imploring heaven for his restoration to health. Full of commiseration and pity for these people I entered the hotel and, preceded by a messenger boy, went up to the patient's room. The boy gave a light tap on the door, and as there was no answer led me in. The great man lay sprawled on the bed in his pyjamas, and did not notice my entrance. He was deeply immersed in an illustrated paper—it was *La Vie Parisienne*. "Relaxation urge from over-work" was my immediate 'spot diagnosis' to myself, "and the desire for a day off." Suddenly noticing my presence, he hurriedly put away the paper with, I thought, the ghost of a sly smile, and submitted himself to the usual examination. He was

She was in the clinic for six weeks, and the result was remarkable. The swelling disappeared completely. But when she left the clinic I again reminded her that the cure was merely temporary, and that she must return for further treatment within six months. She never came back.

About four years later a young Sinhalese woman of about twenty came to my consulting room with her small child, who had an eczematous rash on the face. After examining the child, I looked at the mother and felt sure I had seen her before.

"Aren't you the girl I treated four or five years ago for elephantiasis?" I enquired. She admitted she was.

"Why didn't you come back to repeat the treatment? Didn't I tell you that otherwise the disease would return? Did it return?"

"Doctor," she answered, "after I left the clinic, my ex-fiance called on me and we had a long friendly talk. I convinced him that the elephantiasis had completely disappeared, and he begged me to become engaged again. We married four years ago. Yes, the disease has come back. But what does it matter? I am married now."

In 1907 I carried out some experiments with rabies. One day, while I was inoculating a rabbit intracerebrally with the brain emulsion of a rabid dog, the needle of the syringe, owing to a sudden movement of the rabbit's head when the attendant had slackened his hold, went into my thumb and some of the emulsion entered the tissues. The Principal Civil Medical Officer, Sir Allan Perry, immediately ordered me to proceed to Kasauli, in the Himalayas, to undergo the Pasteur treatment, it was at that time the only Pasteur Institute in the East. The treatment must be started not later than ten days after inoculation of the infective material, and there was consequently not much time to lose, for in those days the journey from Colombo by sea to Madras, and from there by rail across the whole of the Indian continent to Kasauli, took well over a week. There was a boat sailing to Madras at midnight, and a berth on it was engaged for me by the P.C.M.O.

When one went on such a long journey, one always took one's bedding and a servant to look after things. My 'boy' accompanied me: he was a typical Sinhalese youth of about eighteen, with a smooth girlish face and his long hair done up

was invariably that they were going by the foreign line ("The food is so good . . ."). But when the monsoon was blowing—and it blows fiercely for weeks twice a year, the sea becoming very rough and dangerous—the invariable reply was "By B I.". Occasionally someone would add, "After all, as a Britisher I must do my duty to help British concerns in these hard times, especially as we are exposed to such unfair foreign competition owing to our government's stupid policy of free trade."

* * *

In Ceylon elephantiasis is very common; it often affects the legs, which become deformed and of enormous size

I happened to find a palliative treatment, which at times gave dramatic results but was never permanent I made a communication on the subject at a meeting of the Ceylon Branch of the British Medical Association, and the news spread all over the Island that "Galle Leg" (the popular name for elephantiasis of the leg, owing to the fact that it is a scourge in the city and province of Galle) was now curable This was, of course, a gross exaggeration

On one occasion, a Sinhalese lady of the upper classes came to see me, accompanied by a pleasant-looking girl of about sixteen They both wore long saris reaching to the ground, as was the fashion at that period among women of their class

"Doctor," said the mother, "I want your help I have heard you have found a treatment for elephantiasis, you must cure my daughter, who has elephantiasis of the leg Moreover, her nervous system has gone to pieces a year ago she became engaged to the son of a Kandyan Chief, and they were soon to be married Our child was blissfully happy until a month ago, when her fiance accidentally discovered her condition and broke off the engagement" The mother continued in a puzzled voice, "How he discovered it is a mystery to me, as my daughter always wears a long fashionable sari"

I had a look at the leg, it was indeed enormous, although the foot was not enlarged The girl was looking at me with tears in her eyes as she asked if there was any hope of a cure

"The swelling will disappear under treatment," I replied, "but you must remember it is only a palliative treatment and has to be repeated from time to time"

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Kabaka Daudi Boy King of Uganda 1902 Note the



A Rodiya woman carrying water, Ceylon

Kandyan Chiefs

Devil Dancers, Ceyl

swollen all over (wet beri beri) and then as thin as a skeleton (dry beri beri), and finally dies It was popularly believed to be due to eating rice.

The recommendations would have to be based, of course, on the aetiology of the malady was it a food-deficiency disease, or an infection? The two theories had approximately the same number of followers among the doctors present at the convention. It was then decided to put the causation of beri beri to the vote, agreeing that the majority vote would represent the official opinion of the Congress The ballot was secret. The food-deficiency party won (fortunately) by a majority of two! Consequently the official recommendations of the Convention were based on the deficiency theory, which turned out to be the correct one

During our stay in the Philippines we visited the famous Leprosy Island Colony It was a small state within the state, run by the lepers themselves with an American medical officer as moderator They had their own local laws and regulations and their own currency Lepers were allowed to intermarry, provided they signed a declaration to the effect that babies would be taken from them as soon as the [illegible] be bro [illegible]

We [illegible] station, which enjoys a delightful climate the whole year round There we saw the dog butcheries, not a very agreeable sight to western eyes fat, skinned carcases of dogs hung up on hooks were exposed for sale just as fat, skinned lambs and pigs are shown in European butcheries

On our way back from the Philippines we visited various parts of China. It was before the 1911 revolution, and Chinese of all classes still wore the traditional pigtail We also went to French Indo-China and visited Saigon, which was then known as the Paris of the East. It was a fine town, well kept and clean, and I was astonished to see at night brightly illuminated cafés with hundreds of tables on the pavements and crowds of people taking refreshment at eleven and twelve o'clock. How different from British colonies, where café life did not exist and every street was silent and dark after nine o'clock. Saigon boasted a fine opera house they were then giving 'Thaïs', and some friends insisted on taking me to see it. I accepted although rather apprehensive that my old allergic sneezing and-coughing

complex for operatic music might become apparent again. Fortunately it did not, and I was merely bored to extinction.

Government servants in Ceylon did not get their first leave until after seven years' residence, but an exception was made for doctors, who were allowed study leave every three or four years. So I went home several times.

During my 1910 leave in England I married a charming, fair-haired young lady from Yorkshire—Josephine Ambler Stead—and, to echo what Winston Churchill said in reference to his own marriage, "I lived happily ever after". And I can repeat with Euripides that there is in life no more valuable treasure than an understanding wife. A girl was born to us in 1916, our only child. Anticipating many years, I may say that our little daughter never gave us any trouble. When grown up, but still in her 'teens, she married a distinguished diplomat, the present Lord Killearn. It has been a very successful marriage, notwithstanding the rather marked difference in age. I am, at the time of writing, the proud grandfather of three lovely children: Victor, thirteen, who has just entered Eton, Jacquetta, eleven, and Roxana, eight.

My daughter was a British subject by birth, had an English mother, was brought up in England, and possessed a British passport from childhood. Consequently both she and her husband have escaped the rabid attacks of those xenophobic individuals who disapprove of diplomats marrying foreigners. I am proud that Churchill mentions her name admiringly in his memoirs, when she insisted on remaining in Cairo and sharing the perils of the situation with her husband during Rommel's ominous penetration into Egypt.

* * *

In the summer of 1914, in the Pettah quarter of Colombo, a Moorman, apparently in perfect health, suddenly dropped to the ground unconscious, and a couple of hours later was dead. After two days a similar case occurred, also in the Pettah, this time the victim was a Sinhalese. A few days later a crop of three or four more cases was reported. "Sunstroke," proclaimed the Pettah practitioners, but when I heard of these cases I was not at all satisfied with that diagnosis. Cases of sunstroke are rare in Colombo, and why should they all occur

in the same quarter of the city? I had a talk with the Medical Officer of Health, and we decided to hold a post mortem examination on the next case. This occurred about a week later. The body was brought to the post mortem room in great secrecy, as the victim was a Mohammedan and their faith forbids autopsies. All the organs appeared normal except the spleen wh h [illegible]

[illegible]

some stains from the Institute the films were stained and examined at once, and lo! innumerable 'bipolar' bacilli—ends stained, centre clear—were visible. Plague! The microscopical diagnosis was later confirmed by the cultural investigation: it was septicaemic plague, that is to say, an acute general plague infection with no bubos.

When the public heard of our findings, there was much scepticism. Plague had raged in India for many years, but Ceylon, although so near, had always escaped, and the people had come to believe that something existed *in the Island* which kept the scourge away from its shores: perhaps the spicy odours of the cinnamon plantations, which might be repellant to the plague bacillus. Unfortunately, quite a number of further cases occurred: the scepticism in our diagnosis disappeared and was replaced by terror. Energetic prophylactic measures, including plague vaccine, were taken, and the epidemic ceased.

* * *

I served under three Governors—Sir Henry Arthur Blake (1903–1907), Sir Henry Edward McCallum (1907–1913), and Sir Robert Chalmers, later Lord Chalmers (1913–1916). They were all first-class men, very able, and deeply interested in the welfare and development of the Colony. They had in those days tremendous power, far more than any constitutional mon-[illegible]

[illegible]

[illegible] at the complete freedom—not to say licence—of the press: every day lurid and libellous attacks on the Government and its officials were printed, but the libel law was never enforced. A man who was the frequent target of

vitriolic journalistic onslaughts was the head of the Civil Medical Department, Sir Allan Perry, a great organizer and administrator who deserved praise, not blame Under his wise and firm guidance the Medical Department made the greatest progress in its history

None of the Governors under whom I had the honour to serve in Ceylon ever became seriously ill, but I attended them all for minor complaints, often prickly heat The celebrated prickly heat lotion known by my name all over the East was first concocted for one of them, it contains menthol, salicylic acid, calamine, glycerine, and alcohol

I have equally pleasant recollections of the Colonial Secretaries, one of whom was Sir Hugh Clifford, a man of mighty intellect and unbounded energy Not content with his exacting and most responsible official work, he wrote several successful books on the Far East In one of them, *Brown Humanity*, he gave the best description I have ever read of a tropical nervous disease, common among the Malays and occasionally seen in Ceylon, which they call 'Latah' and which is known also as 'Mimicismus and 'Echomatism' The victim feels compelled to imitate the gestures and movements of another person and repeat his words, often interspersing them with the most filthy and obscene language

Later, Sir Hugh became Governor of the West Coast of Africa before returning to Ceylon as Governor, although there was much opposition to the appointment 'A man of vast administrative abilities, but too autocratic and dictatorial' was the usual comment among the progressive parties of the Island

Anticipating, I may mention that in the year 1923 or 1924 Sir Hugh was on leave from West Africa and called one day at Harley Street He held in his hands a number of blue pamphlets "Castellani, do me a favour, he said Put these in your waiting room They are reprints of my recent official speeches in which I recommend an increase in the number of non-official members of the Legislative Council and advocate other democratic measures for West Africa and all the Crown Colonies I know a lot of prominent Ceylonese come to consult you while they're waiting they might pick up these papers and convince themselves that I m all for democratic constitutional progress

The reaction was not enthusiastic in all quarters Sir Solomon Bandaranaike, who was then paying a prolonged visit to England and came to Harley Street almost daily, said to me ' What has happened to Sir Hugh? He has become a rabid radical " In the main, however, the Ceylon visitors were elated with Sir Hugh's declaration of policy

Sir Hugh was appointed Governor of Ceylon in 1925, and proved to be one of the greatest the Island ever had Tragically, after he retired his powerful mind became deranged I was called some years later to see him in a mental home in London, as his old tropical complaint, dysentery, had made a reappearance It was one of the saddest days of my life his memory and his brilliant brain had gone, and he behaved like a torpid, feeble minded child

For many years I was the doctor of the 'Chief of Chiefs', Sir Solomon Bandaranaike, knighted by the British Sovereign and [illegible] His full name, [illegible] s Don Solomon [illegible] Rajaqunarun Kadukeralu Bandaranaike, the Maha Mudaliyar of Ceylon

He was a delightful man with perfect, polished manners, plenty of brains, and a most generous heart We became firm friends His son, a charming and intelligent little fellow, caught diphtheria while at their country home near Veyangoda, and I was fetched to see him Antidiphtheria serum was given I remember I ordered huge doses which surprised the local country doctor

That little boy grew up into a brilliantly clever young man, and was sent to Oxford by his father There—to use his father's expression—he became infected with rather advanced political ideas, and Sir Solomon was very upset At a public dinner I heard that young man, in his second year at the university, give a speech which kept us spellbound it was spontaneous, ebullient, magnificent oratory

While still an undergraduate Mr Bandaranaike was asked to contest an English constituency, but declined A true Ceylonese patriot, he preferred a political career in his own country He soon became Minister of Health Later he resigned this post and became leader of the Opposition in the Ceylon Parliament, and subsequently Prime Minister A wonderful career [He was destined to a tragic end, being assassinated in 1959]

Among my other distinguished patients were the Senanayakes: in every class of the population there was respect and affection for that family, whose head, D. S. Senanayake, became the first Prime Minister when Ceylon was declared independent in 1948. His son, Dudley Senanayake, succeeded him in office in 1952, and was equally popular; he held the premiership for a couple of years and then resigned. Housewives of the world—and especially English housewives—should cherish his memory, for he was the man whose pithy remarks concerning some big tea firms caused the price of tea to tumble from its unprecedented altitude to normal a few years ago.

In Ceylon my patients came from every section of the population, and I liked them all. In the case of the Moors, when their womenfolk fell ill certain difficulties arose: the doctor was not allowed into the room, but the door was left ajar and the patient would hold out her arm so that he could feel her pulse—which was all he was allowed to do. In time, however, I gradually gained their confidence and was allowed to enter the women's quarters during illness. I think I was the only European so privileged. The Mohammedans of those days liked their women to be extremely rotund, and I was often asked for a fattening prescription. The most successful I found to be a porridge-like concoction made of plantains, milk, and molasses.

Other, equally anachronistic, practices still survived, at least in theory. A prominent Indian, who had been residing in Ceylon for many years, came to the conclusion that it would help him socially to become a Christian, and, as the Governor and most of the top officials were Church of England, he became an Anglican. He was made a J.P. and there was talk of higher honours being bestowed upon him. However, he was getting old and, as so often happens, he felt the impelling desire to die in the religion of his forbears and of his youth. Without making it known, he added a codicil to his will, stating that he had returned to Hinduism, and making dispositions that his body should be burned and his funeral carried out according to the strictest Hindu religious rites.

These rites, in the old days, included suttee, the self-sacrifice of the widow, who threw herself on the funeral pyre. The practice was forbidden by the British in India long ago, and in my day a much less drastic procedure had been adopted. The widow, in great distress, ran towards the pyre as if to throw her-

self upon it, but members of the family rushed to her and forcibly held her back.

In the case I am recounting, I watched the funeral from a short distance away I saw the widow, who was hated by the family, in deepest mourning, white robed from head to foot, run weeping, as if beside herself with grief, towards the funeral pyre, which was blazing fiercely At the same time she was looking anxiously from right to left for the relatives who were supposed to come forward to prevent her rash act None came Overcome by mortal terror she stopped suddenly and, shrieking, turned tail and fled

She explained after [illegible] the burning pyre, a fl [illegible] her that Christianity [illegible]

* * *

Fragments of research work in Ceylon

I have always been interested in skin and intestinal diseases, and Ceylon certainly provided abundant material for investigation in both these fields

Soon after arriving in Ceylon I was asked to investigate the most common and important disease in the Island parangi, known also as yaws, framboesia, pian, and boubas In some districts in the interior nearly half the population was afflicted with it, over 50 000 cases every year were treated in Government dispensaries and Government hospitals

[illegible] *fraamboise*, raspberry)

The eruption disappears spontaneously after a few months, but the infection remains dormant, and years later enormous ulcers develop and the bones are affected Often the nose and central portion of the face, including the palate, are destroyed, leaving a huge hole through which the lower jaw and all the teeth can be seen this gives the unfortunate victim a gruesome, spectre-like appearance (the condition is known as *gangosa*) No treatment was successful and mercury, then used for all ills, was of no use I introduced an iodine mixture which soon became very popular because it made the tumour like masses

disappear rapidly; but unfortunately it did not eradicate the infection. Then, in 1911, I received from Professor Ehrlich some of his newly discovered Salvarsan, which proved curative. At about the same time, while working in the Philippine Islands, my friend Dr. Richard Strong came independently to the same conclusion. This treatment was later superseded by bismuth and, in recent years, by penicillin and other antibiotics.

When I arrived in Ceylon there were many theories about the cause of the disease, and a number of different bacteria and a fungus—a cryptococcus—had been described, but none was correct. The real causative agent is a delicate microscopic serpentine organism, which I detected in films from initial unopened papules and named *Spirochaeta pertenuis*. The disease is transmitted by contact and by flies. It is not hereditary, and a mother whose whole body is covered with the horrible sores will give birth to a perfectly healthy and smooth-skinned baby.

Tea-taster's cough

A young assistant in one of the big Colombo firms, a tea-taster, came to consult me about a chronic cough which had not yielded to ordinary treatment and had been suspected by several medical men to be of tuberculous origin. He emphatically stated, however, that he did not believe he had tuberculosis, and certainly his general condition was excellent. "I am merely suffering," he said, "from tea-taster's cough"—an expression I had never heard before. Microscopical examination of the sputum was negative for tuberculosis, and the culture investigation yielded a growth of fungus which I also found in samples of tea dust. I experimentally reproduced the disease by blowing tea-dust into the nostrils of a guinea-pig daily for some weeks; at the autopsy of the animal the lungs were found to be dotted with white nodules, like tubercles. yet they did not contain the tuberculosis bacilli but only the fungus.

How did this patient become infected? In order to judge the quality of the various teas, the tea-taster not only tastes the infusion, but also fills his hands with the leaves and sniffs them, so that a certain amount of tea dust enters the nasal cavities, whence the fungus may be carried to the throat and lungs.

What I have said about 'tea-taster's cough' applies to a great extent to the so-called 'tea-factory cough'. For many years planters in Ceylon had noticed that the coolies working in tea

factories, where the leaves are dried and there is a large amount of tea-dust floating about, after some time become weak, lose weight, and often have a cough, with scanty sputum The planters long ago found by experience that the coolies must be taken away from the factory and sent to work in the fields, where the symptoms slowly disappear I examined some of the affected coolies on an estate, and their sputum always contained fungus

'Pseudo-dirty skin' (*Cryptococcus epidermica*)

One of my bungalow boys in Colombo wore rather short clothes, and I noticed what I thought were patches of dirty skin on his legs I reprimanded him severely, and told him he must wash his whole body regularly with soap and water "Master, this no dirt,' he answered "I use plenty soap but patches don't go" I took him immediately to the Bacteriological Institute, and there examined scrapings from a patch, finding a fungus which I called *Cryptococcus epidermicus*

This condition is found also in Europeans, some of whom become greatly worried about the 'dirt' which does not disappear with soap and water It has been found also in Europe

Tokelau (*Tinea imbricata*)

This hideous disease does not kill, but it lasts for life The entire body is covered by large scales, up to half an inch across, which overlap one another like tiles on a roof, hence the term 'imbricata', introduced by Sir Patrick Manson The itching is intense and sleep is impossible, you see these poor wretches, incapable of work, squatting in their compounds violently and continuously scratching their whole body The treatment is extremely difficult, but it is generally admitted that the fuchsin paint introduced by me some years ago gives the best results, even so it takes many months to obtain a cure

In the 1870s while trying to discover the cause of tokelau, Tilbury Fox and Patrick Manson found a fungus in the scales, and in 1909 I succeeded in cultivating it in the laboratory By inoculating volunteers with pure cultures of the fungus I reproduced the disease, stopping the experiments before the malady fully developed

It is interesting to note that this microscopic plant has the same climatic requirements as the tall coconut tree both

disappear rapidly; but unfortunately it did not eradicate the infection. Then, in 1911, I received from Professor Ehrlich some of his newly discovered Salvarsan, which proved curative. At about the same time, while working in the Philippine Islands, my friend Dr. Richard Strong came independently to the same conclusion. This treatment was later superseded by bismuth and, in recent years, by penicillin and other antibiotics.

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infectious disease, and to save the individual the discomfort of several injections, seems obvious at the present time, but in those days it was considered revolutionary. When I introduced the typhoid + para-A + para-B vaccine, there was much opposition I was told by no lesser a man than Leishman· "If you give a vaccine containing typhoid, paratyphoid-A, and paratyphoid-B, you will give the inoculated person only one- [illegible]

[illegible] out years previously in Bonn, under Professor Kruse, were forgotten These experiments proved that, when a rabbit was inoculated with three or four or even five different *bacteria*, [illegible]

[illegible] spective monovaccine in control animals In Ceylon I was able [illegible] In [illegible] in [illegible] essor Browning He was extremely keen on these experiments, and was always asking for more inoculations, he became a 'vaccine fiend', but modern combined vaccination owes much to him

The Ceylon Government Health Authorities recognized my combined vaccines which were later adopted also by all the armies in the First World War, the first being the Serbian army *In 1916 the* British army eventually adopted my triple vaccine TAB (typhoid, para-A, para B) and my quadruple vaccine TABC (typhoid, para-A, para-B, and cholera), but in the heavy tome of the official medical history of the First World War they are referred to as Leishman's vaccines—thus is history written Of course, this was not Leishman's doing he was noted for his extreme scientific honesty But he was at the head of a great public service, and, as in the case of everyone in a position of power, not a few flatterers and adulators were in his entourage

* * *

At the end of November 1914 some interesting 'patients' were placed in the ward of the Colombo General Hospital, next to

flourish in an equable, hot, and humid climate, and their geographical distribution is exactly similar

Copra itch

Copra is the dried coconut 'meat' from which coconut oil has been expressed There are many thousands of copra workers in Ceylon, and a number of them suffer from an extremely itchy eruption on the arms which was habitually—but erroneously—diagnosed as scabies It is due to the irritation caused by myriads of minute mites swarming in the copra handled by the workers I easily reproduced the eruption by picking some mites from the copra dust and placing them on the skin of volunteers

The copra itch mite never burrows its way into the skin as the acarus of scabies does Its scientific name—very high sounding for anything so minute—is *Tyroglyphus longior* Gervais var *castellanii* Hirst

Intestinal diseases

It was in Colombo, in 1906, that in two cases of feverish colitis which had been suspected to be paratyphoid, and later in several cases of acute dysentery, I found an organism which remained practically unknown for many years but has recently come to the fore with the name of *Shigella sonnei* or *Castellanus sonnei* Soon after I found *Bacillus madampensis*

Two other bacteria of some interest which I described during my stay on the Island, one, *Bacillus columbensis*, produces a paratyphoid like disease which has also been found in other parts of the world a case has been described quite recently by Professor Servino in Rome The other, *Bacillus asiaticus*, causes a low intermittent fever in a number of cases of severe ankylostomiasis which persists for months after the worms have been expelled

Among other intestinal bacteria I found is one named *Giumai* I gave it that name, as mentioned elsewhere, to honour the memory of my faithful African servant and laboratory attendant

Combined vaccines

The idea of combining several vaccines in one, to simplify and speed up vaccination campaigns against more than one

began at 9.40 on the morning of November 9 It was an unequal battle—the *Emden*'s 3 500 tons and 4 inch guns pitted against the *Sydney*'s 5 000 tons and 6-inch guns—and lasted one hour and forty minutes The German cruiser fought valiantly to the end, and her ensign was still flying defiantly when she grounded on a reef off North Keeling Island Seven of her officers and over a hundred ratings had been killed, while the *Sydney* suffered only four fatal casualties

Captain von Muller survived He was taken prisoner and sent to Ceylon, where he was accorded the treatment due to a gallant officer and a chivalrous man

One night, from the distant part of the Hospital where the German sailors were, the melancholy yet proud notes of a song reached the Seamen's Ward—the Song of the *Emden*

> Schiff ohne Hafen, Schiff ohne Ruh,
> Fliegende, fliegende *Emden* du
> *Kannst ja nicht sterben, es* jagt daher,
> Ewig dein Schatten uber das Meer [illegible]*

Captain von Müller [illegible]
and was then taken to [illegible]

After the armistice, [illegible] saw him then could hardly recognize the smart naval officer *of a few* years ago he had aged, he looked drawn and gaunt, and grief and sadness had lined his face deeply He died at the age of 50 of pneumonia

* * *

In the same month that the *Emden* was at last brought to bay, November 1914 I received orders from the Italian authorities to be ready for mobilization in the Medical Service of the Armed Forces (Naval Branch) Since I had not adopted British nationality I had no appeal against this decree So it has been every time Italy *has gone to war—I* have been recalled by the Italian Gov*ernment for* medical service in the naval branch One has no say in the matter it is conscription for life.

At the beginning of 1914, a few months before the outbreak of war the Colonial Office in London and the Government

* Literal translation *Ship without harbour ship without rest Fleeing fleeing Emden thou! Thou canst never die always pursued Ever your shadow over the sea.*

the Seamen's Ward of which I was in charge. They were Captain Karl von Muller, of the famous German raider *Emden*, and a few of his officers, who had been taken prisoner in the naval battle of the Cocos Islands (November 19).

Some months before the declaration of war, the *Emden*, a modern fast cruiser of 3,500 tons, under the command of Captain Karl von Muller, was a unit of the German sea-force gathered at Tsingtao, the German naval base in northern China. On July 30 a telegram was received from Berlin announcing a state of emergency: war with Russia and France was imminent. To prevent a possible 'bottling up', the following day the *Emden* and the ancient battleship *Kaiserin Elisabeth* steamed out of the harbour into the Yellow Sea: they were never to meet again. On August 3, after the official declaration of war became known, the *Emden* started her race south across the China Sea, soon passed through the Malay Archipelago by little-known routes, and reached the Indian Ocean and finally the Bay of Bengal, the last place where anyone expected to see a German warship. Between September 10 and 14 she sank six British vessels. A seventh ship, the *Kadinga*, was not torpedoed: it was captured, and Captain von Muller, who was a gentleman, used it as a transport ship for the survivors of the ships which had been sunk.

On September 29, the *Emden* appeared off Madras, shelled two large oil tanks, setting half a million gallons of oil on fire, and then vanished before the shore batteries opened fire on her. Three days later she appeared off the coast of Ceylon, bombarded a few places, and within three days sank six ships with a total tonnage of 19,000 tons

On October 29, the *Emden* leisurely approached the island of Penang in the Straits Settlement, where a Russian cruiser and a French destroyer were lying at anchor. Neither the Russians nor the French took much notice of the oncoming ship—she had four funnels and everybody knew that the *Emden* had three (the fourth, a dummy, had been added by von Muller for the occasion). She fired a torpedo at close range, and the Russian cruiser blew up. Immediately after, her guns opened up on the French destroyer, which foundered within a few minutes

[illegible] continued her career, terrorizing the seas In the [illegible] er, she was at last intercepted by [illegible] The battle between the two ships

CHAPTER V

THE FIRST WORLD WAR

When I left Ceylon in January 1915, I received a great surprise I had to get a passport. In the halcyon days before World War I nobody troubled about passports, with the exception of Russia and Turkey, you could travel all over the world without one

The voyage from Colombo to Marseilles on a P & O liner was uneventful In the neighbourhood of Marseilles, large bodies of French Colonial troops were stationed, and I remember being asked by the French military doctors to see a number of cases of what they called *Bronchite sanglante de Castellani* (broncho-spirochaetosis) among the Senegalese Tirailleurs They were spitting blood, and had been suspected at first of suffering from tuberculosis But they looked in good health, and Koch's bacillus was absent, instead, the sputum teemed with spirochaetes

From Marseilles I went by train to Rome, a long, wearisome journey, and there I immediately reported to the Naval Ministry, where I was told I should be called up very soon In the meantime I might pay a visit to Naples, where the university had appointed me Professor of Tropical Medicine

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call to fill a newly-created chair any man of 'international fame', without *concours* or any other of the usual bureaucratic procedures I certainly did not consider myself a man of international fame (and neither did any of my intimate friends) The professorship would be in abeyance during my service in the armed forces, but I should get it back immediately the war ended

In Naples I called on the Rector of the university and Dean of the Medical Faculty, to thank them for the honour they had done me During the course of the conversation I asked "May I go and see the Tropical Hospital?"

There was no tropical hospital

of Ceylon had elaborated a scheme to create in Colombo a Research Institute of Science in all its branches including medicine I was to be its first Director Sir Robert Chalmers, then Governor of Ceylon, informed me of the scheme, adding "This will be a new government department, and you will be responsible directly to the Governor and not to the P C M O But we cannot have in charge of a government department a *man with alien citizenship Will you become naturalized?"*

I answered that I greatly appreciated his offer, but could not see my way to changing my nationality to do so would be like denying my mother Sir Robert shook my hand "Castellani, I feel more respect for you now than a few minutes ago, when I expected you to say 'yes'" *Could there be a better example of* British fair-mindedness?

Risking the charge of vanity, I quote two paragraphs from Sir Robert Chalmers' despatch to the Under Secretary of State for the Colonies

The Queen's House,
Colombo,
Ceylon
28th January 1915

"I desire to take this opportunity of expressing the great loss sustained by the Colony by the departure of Dr Castellani who, during a period of eleven years rendered invaluable service both to Government and to the community at large, while increasing his already great scientific reputation

"It will be difficult to fill his place, and it is the more necessary that an officer of considerable reputation and attainments should be appointed"

So I left Ceylon in January of the year 1915—but a part of my soul remained there The memory of the Enchanted Island stirs in my heart an emotion which can only be expressed as love I was a lover of that wondrous country then I still am, and I shall be to the end of my days

come into fashion) The dinner was served by gigantic footmen in gorgeous uniforms and white perukes—but only on official occasions, as normally the Duke and Duchess lived a simple life

The Duke was the grandson of Victor Emmanuel II of Italy Slim and very tall, with silvery hair, a pale but healthy complexion, and most aristocratic features, he looked very handsome in his general's uniform He had just been appointed to the command of the Third Italian Army, which was destined to cover itself with glory during the war He was a great soldier, and beloved of his men

The Duchess Hélène, Princess of France, daughter of Louis Philippe Albert, Comte de Paris, was tall and slim, with refined features and a delicate profile, she had blonde hair, blue eyes, and a rosy complexion Erect and regal in appearance, she nevertheless had an indescribable grace of deportment, and to watch her walking was a pleasure to the eye Virgil's verse came spontaneously to mind—*Vera incessu patuit dea*

The Princess was a great traveller, and very keen on big-game hunting, she had visited Central Africa several times, and Ceylon twice It was in Ceylon that I first had the honour of knowing her She was very interested in medicine, and more than once visited the Colombo Tropical Clinic, in one of her books she gives a delightful description of it, with a picture of the building The Princess possessed not only charm and grace, she had a fine intellect—perhaps more masculine than feminine—and an indomitable will, and was endowed with rare organizing powers At the beginning of the war she was placed at the head of the Italian Red Cross, she completely reorganized the nursing service, insisting that the Red Cross nurses should receive a practical training

And this was very necessary, for at the beginning of the First World War the Red Cross nurses in Italy were called *Dame* (Ladies) and practically all of them were of the nobility—a plethora of duchesses, marchionesses, countesses, and baronesses They were beautifully attired, charming and glamorous in their becoming uniforms—sky blue in winter, white in summer, with a Red Cross on the blouse Their intentions were of the best, but their practical knowledge rudimentary Their routine ward work consisted chiefly of wiping the feverish brows of the patients, and patting their foreheads very soothingly

"May I go and see the Tropical Laboratories?"

There were no laboratories

I was given a ward in the oldest and most dilapidated hospital in the city, built three centuries ago under the Spanish domination It was filthy The patients, unshaven and unwashed, passed their time in various spitting games the walls were dotted with sputa in different stages of execution Nursing was non-existent, conditions had not changed for three hundred years

I have mentioned a Neapolitan hospital of long ago After the First World War, in the 'twenties and 'thirties, all this changed, and now some of the finest hospitals in the world are to be found in Naples, and the city itself has become one of the cleanest and best-kept in Europe Whatever harm Fascism may have done in other fields (and it did appalling harm in its last years of existence), no one can deny that in the domain of hygiene and medicine it did an enormous amount of good

I managed to give only one lecture, the 'Inaugural Address', and then, receiving telegraphic orders to report to the Ministry for the Navy, hurried to Rome I was put on the active service list, and given the rank of Major In the Italian Navy members of the Medical Branch, and all other branches apart from the actual combatant officers, are given a military and not a naval rank For instance, there is no Surgeon-Admiral, he is a Surgeon-General, and so on

During the few weeks I was in Naples I had the honour of being a frequent guest at the *Reggia di Capodimonte*, the residence of the Duke and Duchess of Aosta Situated on the summit of a small hill, surrounded by lovely gardens and quite close to the city, it possessed a most wonderful view of Naples, with its blue sea and beautiful, gracefully curving bay dotted with small towns and villages The Reggia, a massive and imposing building with long arcades opening into vast courtyards, was built by one of the Bourbon kings in the eighteenth century The interior was magnificent One walked through a long sequence of spacious state apartments filled with masterpieces of painting and sculpture before reaching the drawing room where the Duke and Duchess received their guests From the drawing-room one passed through another series of salons to the dining-room, which was brilliantly lit with Murano crystal candelabra and chandeliers (the dim lighting of dining-rooms had not yet

Wales, and heir to the British throne, was very much in love with her and wanted to marry her She reciprocated his feelings, but her father, a descendant of the Catholic Kings of France and claimant to the French throne, refused his permission owing to the difference of religion between the two lovers

* * *

In April 1915 I was appointed to the naval hospital at Taranto I worked in the infectious diseases ward and in the bacteriological laboratory In charge of the laboratory was a very young man who, I am afraid, possessed more enthusiasm than bacteriological knowledge He informed me that some weeks before a sailor had died in hospital of an extremely acute type of pneumonia He suspected pneumonic plague and, so he said had actually grown the plague bacillus from the sputum, to the great surprise and consternation of the clinician, who fortunately stuck to his own diagnosis of lobar pneumonia

Having recently arrived from Ceylon I was, of course, very interested in plague, and asked the young bacteriologist to show me a culture of the organism he had isolated He did so The culture seemed to me rather peculiar it had a crinkled surface A microscopical examination revealed that it was composed almost solely of innumerable spores which, being bipolar-staining (extremities stained, central portion unstained), had been mistaken for plague bacilli, which are also bipolar-staining The organism was not the plague bacillus, but the potato bacillus (*Bacillus subtilis*), a common contaminant found in dust

After only a few weeks in Taranto I was posted to Salonika, Macedonia, and Serbia

By the end of 1914 the Serbian Army, although victorious over the Austrians, had sustained heavy losses, and many doctors had either been killed, taken prisoner, or died of typhus and cholera The Serbian Government then asked Great Britain, France, and Italy—although the last had not yet entered the war—for medical officers to fill the huge gaps I was one of the Italian doctors selected I sailed from Naples on May 21, 1915, and it was on the journey to Salonika that the news came through that Italy had declared war on Austria (May 24)

Approaching Salonika we perceived in the distance a number

The ladies came on duty at 9 a m , an hour before the visiting doctors' rounds at ten One morning I went to the wards at 8 30 The ward door was ajar, and while in the corridor I heard a cacophony of mixed noises—loud belching predominating, and other fermentative sounds I asked the young house physician what all the uproar was about, and he replied ' The *Dame* are due in half an hour, sir, and the patients are making every effort to rid themselves of their inner gaseous products before they arrive They feel so shy when the ladies are here, some of them have actually become ill from the strain of retention Yesterday one of them was nearly operated upon by our enthusiastic new young surgeon, who suspected appendicitis But it was only gas They never have the courage to ask the ladies for the bed pan "

The Duchess of Aosta soon changed all that The training of the *Dame* was made practical and the patients were not slow in noticing it and in behaving accordingly, rapidly the cases of extreme meteorism simulating abdominal complications disappeared from the wards

The Duke and Duchess had two sons Amedeo, then seventeen years of age, who was a cadet in the Military College of Naples, and Aimone, aged fifteen, a cadet in the Naval Academy at Leghorn They were great lads, full of fun and high spirits Although under age, they both fought in the war and were decorated for valour

Amedeo was to become Viceroy of Ethiopia In 1941, after an epic resistance against great odds, he was obliged to surrender to the British at Amba Alagi A few months later he died of pulmonary tuberculosis in Nairobi It was a fierce grief to his mother, but, to prove what a superior and fair minded person she was, I may recount that, when asked by the Fascist Propaganda Minister to proclaim to the world that her son had died through privations inflicted upon him by the British while he was a prisoner, she flatly refused "I detest untruthfulness," she replied "My son was well looked after, and I am grateful to the British for their consideration '

Few people know that the Princess was born in England, at Twickenham, on June 13, 1871 (she died near Naples on January 6, 1951), and even fewer people are aware that, when she was very young a romance sprang up between her and the Duke of Clarence The Duke, eldest son of Edward, Prince of

Serbian officer was admitted to an Allied hospital not far from rune He was vomiting, had high fever, and complained of excruciating pain in the right lower abdominal region, which increased on the slightest pressure Appendicitis, of course! The admission officer called in the surgeon, a very young man newly arrived from England, and extremely enthusiastic. 'Gangrenous appendicitis,' he declared "We must operate at once'

By chance I was on the premises, having been called to see a suspected case of leprosy, and as a matter of courtesy I was asked to see the patient. Examining him, I found he had a large, hard spleen, and, having seen similar cases in the Tropics, I suggested that before operating we might take a blood film to exclude malarial pseudo-appendicitis The surgeon smiled contemptuously and did not deign to answer, he directed the attendants to take the patient immediately to the operating theatre The appendix was removed Apart from a slight hyperaemia, there was no pathological lesion. Within a few hours of the operation the temperature dropped to normal, the vomiting ceased the pain disappeared, and the whole of the next day the patient felt quite well and [illegible] food to the [illegible] the third da[illegible] a violent shivering fit vomiting started again, and the patient once more complained of acute pain in the appendicular area The surgeon suspecting a possible purulent complication, wanted to reopen the abdomen, but the resident physician insisted on my seeing the patient before any such procedure was adopted A film was taken from the finger and the blood found to be teeming with malarial parasites Quinine made all the symptoms disappear

Malaria may simulate practically any disease I know of In Macedonia I saw cases of pseudo-meningitis, with retracted head and stiff limbs pseudo-cerebellar abscess with low fever, vomiting and tottering gait (one had been mistaken for drunkenness) pseudo-dysentery with bloody diarrhoea and mucus

Medical men who have never practised in heavily infested malarial regions are sceptical about these conditions, but any doctor who has worked in Assam or the interior of Ceylon, in Equatorial Africa or even until comparatively recently, in certain regions of southern Europe—the Pontine Marshes,

of small dirigible cigar-shaped balloons hovering over the harbour they were used to detect submarines and floating mines After two days in Salonika I went on by rail to Macedonia and Serbia, an uncomfortable journey I shall always remember the snail-like pace of the train on the makeshift wooden bridge over the River Vardar in flood, we all thought that at any moment the rickety structure would collapse and the train crash into the swirling waters

I was received by the Serbian authorities with great courtesy and kindness Serbian hospitals were scanty in number and lacked equipment and drugs, but fortunately several well-equipped hospital units had been sent to the country by the English Serbian Relief Fund and other English organizations, and also by the American Red Cross I had the good fortune to be attached to the Anglo-Serbian Military Hospital superintended by Lady (Leila) Paget, a tall, fair, slim young woman, endowed with indomitable spirit and energy She was a cousin of the Marquess of Anglesey and the wife of Sir Ralph Paget, a distinguished British diplomat I had met them both in Ceylon a few years previously when they became engaged, he was then Minister to Siam and she was on a pleasure trip to the East Later he was to become Ambassador to Brazil

Lady Paget was an extremely kind-hearted person, but she could be stern when necessary and she knew how to keep discipline She used to work at all hours, indefatigably, and, to see her walking at night, lamp in hand, through the darkened wards, one could not help being reminded of Florence Nightingale she was indeed a second 'Lady of the Lamp', and she did as much good in Serbia as Florence Nightingale had done in Scutari She was adored by the Serbs

I enjoyed my work in Serbia The pathology of the country was chiefly tropical, and I felt quite at home it was like being back in Ceylon Typhus, typhoid, cholera dysentery were rampant Malaria was a scourge In the Struma Valley British battalions and French regiments freshly arrived from home would have ninety per cent of the officers and men down with the disease within six weeks How could they be used as fighting troops? For over two years malaria was indeed the real cause of the Allied military failure Pernicious forms were quite common, and forms simulating other diseases very frequent, including surgical diseases Here is an example A young

the months I spent in Corfu, our hospital was out in the country, on the slope of a small hill covered with olive trees, but within easy reach of Corfu city The whole of the Island was covered with olive trees, and the population really lived on the olive industry But I observed that the trees, which all looked very ancient and gnarled, were never tended they were not manured or pruned and the olives, instead of being gathered straight from the trees, were picked up from the ground after they had fallen—quite a different method from the one I remembered as a child in Tuscany

At the end of 1916 and the beginning of 1917 things began to improve for the Allies in the Balkan Zone, where several fresh British French, and Italian divisions had arrived Moreover, the larger part of the Serbian Army, after recuperating, had been transferred from Corfu to Salonika and Macedonia

I went back to Macedonia and became attached [illegible]

[illegible]

also attached to the American Red Cross Clinic and Laboratories The Head of the American Red Cross Commission was the famous tropicalist Richard Strong, of Harvard University, whom I had first met in the Philippine Islands in 1910 We became firm friends In charge of the laboratories was Hans Zinsser, who was then Professor of Bacteriology at Colombia University and later went to Harvard He was a most experienced bacteriologist, a man of great culture, and a most entertaining writer Zinsser was very enthusiastic about my combined vaccines which gave contemporaneous immunity for several infections at one shot He had my tetravaccine (typhoid + paratyphoid A + paratyphoid B + cholera) prepared in huge quantities and organized groups of doctors, who went on horseback to the most distant parts of the front to vaccinate the fighting troops

I liked Macedonia immensely The country was interesting —mostly mountainous extremely hot in summer, extremely cold in winter The hills of our district were dotted with villages the inhabitants of one village would claim to be Serbs, of another village Bulgars, and of a third Greek, the population was indeed a mixed one It is said that the dessert known as *Macédoine des fruits* a mixture of every kind of fruit and a standard item on the menu of all international restaurants, was

Sicily, Sardinia—knows them well They were described in a masterly manner by Lancisi over two centuries ago and in much more recent times by Baccelli Manson, and Ross

By the autumn of 1915 the war in the Balkans was not going well for the Allies, and Serbia and northern Macedonia were soon overrun by the Austrians, Germans, and Bulgarians In December part of the Serbian Army retreated across Albania, suffering intense privation and misery, part went south

The Italian Government had decided to get an expeditionary force ready for the Balkans, and I was urgently recalled to Italy to advise on medical requirements I had a number of talks with Surgeon General Filippo Rho of the Naval Service—a really first-class man—and with the heads of the Army Medical Service, and although I was a mere major, I also had conversations with various admirals generals and high government officials They were all terrified of typhus and cholera and with the exception of Rho, did not realize that from a military point of view the greatest danger was malaria Little attention was paid to my earnest advice to replenish the army stores with quinine which was already hard to obtain on the market

At the end of January I received orders to proceed to Corfu where the Serbian troops who had survived the ghastly Albanian retreat had been transported by the Italian and French war ships from the Albanian port of Vallona and were resting and recuperating I embarked at Bari on a French destroyer I recall that the chief subject of conversation in the wardroom concerned mines apparently a vast number of them had been laid by the Austrians in the Adriatic on the usual route to Corfu from Bari and near the coast One of the officers remarked nonchalantly 'Our destroyers go at such a speed that floating mines are kept away by the terrific bow wave we produce' I confess I had my doubts and still have about the correctness of that officer's comforting theory However we arrived safely at Corfu We anchored and on shore rather to my surprise I spied from the bridge a number of French officers in smart pre war uniforms blue tunics and red trousers predominating They were officers of the French delegation to the Serbian Army

I rejoined my old hospital Lady Paget had unhappily been captured in Macedonia and the new Superintendent was Mr Warren, a good administrator and a very kind man I enjoyed

Peasant No 2 "Thank God, quite well"

Peasant No 1 "And how are your wife and womenfolk?"

Cattle, sheep, and domestic animals in general took precedence over the women of the family

While in Macedonia I was at one time, for a brief period, in charge of a cholera hospital a few miles behind the lines the yellow flag flew permanently from a tall pole I noticed that officers and soldiers, on being released from the trenches, when they marched back to the resting base always made a wide detour on approaching our hospital The officers never accepted our invitations to a meal The mere sight of the yellow flag, meaning cholera, plague, or yellow fever, struck terror in men who had for weeks fought bravely under continuous enemy fire This proves that courage is not 'omnivalent' or even 'polyvalent', a man may be a hero when exposed to bullets, and a poltroon when exposed to microbes, and vice versa I well remember an assistant in that hospital turning deadly pale and trembling all over when he was asked to accompany me on the routine weekly medical inspection of the trenches

* * *

On October 17, 1917, the Italian Army was seriously defeated at Caporetto and had to retreat from the Carso Mountains—from where Trieste, its goal, could be spied in the distance—to the River Piave The losses were great, not least among medical officers, many of whom had been taken prisoner The Government recalled to Italy all the medical officers lent to the Allied countries From Macedonia I went to the Piave front and was attached to the Brigata Marina, a brigade formed of sailors who had undergone some infantry training (in Italy there is no Marine Corps) My work was chiefly connected with the prevention of malaria, of which there were numerous cases, but rarely pernicious ones as in Macedonia The Brigata Marina was holding the extreme right of the line ending at the Adriatic Coast, a little north of Venice It was commanded by a dare-devil officer, Naval Captain Count Denuce di Frasso He inspected the most advanced posts regularly twice a day, but did not walk he rode a pony, and it was a strange sight to see a smart looking officer in naval uniform on a rather emaciated little quadruped that often

coined by a French chef in the employ of a Russian Grand Duke during the Crimean War in reference to the mixture of races in Macedonia.

Whatever their race, I loved the Macedonian peasants, usually fine tall fellows, lean, rather sharp-featured, hard-working, and honest. They were somewhat primitive in their habits, and did not appear to have a close acquaintance with soap and water; in fact, they felt an innate aversion to both, and the greatest ordeal of the average young man when drawn into the army was the first bath or shower. Oddly enough, they were not malodorous—or, if so, only very slightly, and then only in the summer months. Their outer garments, made of local wool, were picturesque and brightly coloured, but white predominated. Their underclothes consisted of a shirt and a pair of pants which was sewn into the edge of the shirt by the mother or wife. These were changed once a year, in November.

I once saw the shirt-*cum*-pants of one of these men when the date of changing was approaching: the poor fellow had typhus, and had been admitted to our hospital. We had to use a pair of extra strong shears to cut into the stiffened underclothes and remove them bit by bit. Their inner surface appeared jet black, being covered with a sort of thick, tarry-looking coating which on close examination showed some slight but perceptible signs of life feebly undulating and heaving it was made up of millions of lice and their excrement.

I became quite friendly with a number of these peasants. One of them once came to see me because his wife was ill, and he wanted me to examine her. He addressed me as follows: "Sir, I should like to bring to you—*da prostiš*—my wife. The woman —*da prostiš*—has been ill for a long time, but has no confidence in the district doctor. Therefore, sir, if you will consent to see—*da prostiš*—my wife, I shall be most grateful "

It was explained to me later that the words *da prostiš* meant 'pardon me', and that in polite peasant society the expression 'pardon me' was *de rigueur* when mentioning the wife or a female member of the family. I was told also that, when two peasants met after not having seen each other for some time, the conversation would run something like this

Peasant No. 1: "How are your cows and pigs?"
Peasant No. 2: "Thank God, quite well "
Peasant No. 1: "And how are your sheep and goats?"

people rushed into the churches. The façade of St. Mark's was slightly damaged

It is interesting to note that the Italian military situation was saved by the young soldiers, boys of seventeen and eighteen just called to the colours by special decree Until then the idea had prevailed that the best soldiers were men of maturer age, between twenty five and thirty five The older men, however, were worrying continually about their families, and their morale consequently deteriorated, the youngsters had no family anxieties, and were aflame with patriotic enthusiasm I remember seeing on the outside wall of a half-destroyed peasant's house near the Piave, in huge white letters, the inscription "*Meglio leone un giorno che pecora cent'anni*", which means, 'Better to live one day as a lion than a hundred years as a sheep"

At the beginning of 1918 I was appointed junior Italian representative to the *Office International d'Hygiène Publique*, and was placed on various inter allied commissions And so, after three years of real warfare, I began a peaceful life in Paris and London Occasionally an air raid took place on either city, but only very rarely was anyone hurt, and nobody took much notice of them I was in London when the famous Zeppelin airship was destroyed I saw the scene from the roof of the Royal Society of Medicine in Wimpole Street. The Zeppelin, in the intense blackness of the night, was suddenly caught by a search-[illegible] it. It was a small British plane Its gun fired two shots, which pierced the airship, and abruptly the monster began to fall, breaking midway into two portions, both ablaze. The whole population of London was watching from the streets and roofs and tumultuous applause broke out

In June 1918 I was in Paris attending a session of the *Office International d'Hygiène Publique* and the meeting of the Inter Allied Sanitary Commission At about midday I was on my way to the Hotel Crillon, where I had been invited, with the other members of the Commission, to a luncheon given by the Ministry of War Suddenly I heard a deafening explosion not very far away, but no 'plane or Zeppelin was in sight. Half an hour later, when the luncheon had just begun, we heard a similar explosion, and still there was no sign of a 'plane or

half-sank into the muddy, marshy ground. In this way Frasso made himself an easy target for every enemy sniper; yet they never got him, or his charger.

The most advanced post was commanded by a young naval officer, Lieutenant-Commander Prince Boni Boncompagni. During a recent short leave in Milan he had married Carla, the beautiful daughter of Prince Borromeo Arese. He wrote to her twice a day, sitting at a rickety table in the open in front of his 'headquarters', an old half-destroyed peasant's house, while a desultory bombardment was going on all the time and the table was shaking. Once I visited his post with two other medical officers and a pharmacist, with drugs and some precious quinine for his sailors He asked us to lunch, and the same rickety table in the same position was used for the repast. I never tasted such excellent spaghetti as was cooked by one of the sailors that day, and fortunately we were not disturbed by the enemy.

Before lunch Boncompagni announced "The commander of the enemy post in front of mine is a gentleman He does not worry us during meal times, but today, when he sees so many people, he may think I'm giving a riotous party, and get annoyed, and send us a direct hit. We must hide." So a big square straw screen with a wooden frame was quickly placed in front of the table Funnily enough we felt quite safe behind it, although it was certainly no *panzer* protection, any air-rifle pellet would have pierced it easily

That young officer covered himself with glory during the war, was promoted, and received the much coveted silver medal for bravery on the field Tragedy came to him in later life. his seventeen-year-old daughter, his only child, died of leukaemia He renounced his titles and possessions in Italy, and went to America to try and forget, immersing himself in a hectic business life

One day I was in Venice on official business I had to see the Director of the Naval Hospital, the famous Surgeon-Colonel Cavalli, who had been a member of the expedition to the North Pole led by the Duke of Abruzzi in 1899 1900 I was just outside the church of San Marco when suddenly the sirens sounded and within a few minutes a number of Austrian and German 'planes were over the city dropping bombs No one had ever thought that Venice, city of art belonging to the whole world, would ever be bombarded. There were no shelters, and the

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Although I was not a surgeon I was also placed on the Inter-Allied Surgical Commission, on which there was another non-surgical man, the famous bacteriologist, Sir Almroth Wright. The Commission met regularly in Paris every two months I noted with interest how the type of treatment which these eminent surgeons recommended for the same types of war wound underwent a drastic change on every occasion. In a [illegible]

had not been discovered in those days, how many lives would have been saved, how much suffering averted

* * *

I shall never forget November 11, 1918 I was working in the Italian Military Delegation Office, not far from Trafalgar Square There was not much official work to do that day, and I was correcting the proofs of a new edition of Castellani and Chalmers' *Manual of Tropical Medicine* Suddenly the guns boomed, the bells pealed, the sirens sounded and a tumultuous shout went up from all parts of the city The Armistice had been signed The four years of cruel fighting were over Cheer- [illegible]

[illegible], women and children were frenziedly stamping, jumping, dancing and singing

After the armistice I expected to be demobilized, but it was not to be I received orders to continue my work with the various Inter-Allied Commissions, and to attend regularly the meetings of the *Office International d'Hygiène Publique* The following year I was sent to Poland

airship And the whole afternoon at regular half hourly intervals, these mysterious explosions continued They were the projectiles discharged by 'Big Bertha', a gigantic German gun sixty miles away

During the last few months of the war, Inter Allied Commissions sprang up like mushrooms in Paris and London I was on several of them, including the Quinine Commission Quinine in those days, was as important as gunpowder and bombs In the Balkans, in East Africa, on the Piave Front, hundreds of thousands of Allied soldiers were down with malaria and military operations were at a standstill Almost daily we received from those fronts desperate calls for quinine which was then the only specific for the disease The bulk of the drug came from Java, and the trading of it was in the hands of a Dutch consortium Holland being neutral the Consortium sold the drug to both the Allies and the Germans The Commission tried by much correspondence and urgent cabling to have the amount of quinine allotted to the Allies increased and its price, which had rocketed to incredible heights reduced, but in vain It was then decided to invite some representatives of the Consortium to London and discuss matters amicably in sociable surroundings I remember they were given an exceptionally good luncheon at the Ritz Hotel The Netherlanders were most courteous and polite but they stubbornly refused to make any concessions and after a brief stay they returned to Holland

About eight or ten days later the news appeared in several Continental papers that a small British squadron had been seen cruising in Dutch East Indies waters not far from Java and there were editorials suggesting that this might be the prelude to British occupation of the Island It may have been a coincidence but within three days of this item of news appearing in the foreign press we received a cable from the Consortium informing us that henceforth the amount of quinine allotted to the Allies would be doubled and the price reduced by twenty per cent I have never been able to find out whether any Allied warships really did visit Dutch East Indies waters at that time Personally I believe that it was merely a rumour—a rumour however that brought most beneficial results to the Allies British French Italian and Serbian soldiers no longer died of malaria in their thousands and military operations were no longer impeded by that scourge

From Vienna we proceeded to Poland, and arrived in Warsaw after a long journey interrupted for a couple of days at Cracow, a lovely old city famous for the tombs of the Polish kings My first impression of Warsaw was that I was back in some Italian city The houses were built in the Italian architectural styles of the eighteenth and nineteenth centuries, and many of the windows had venetian blinds The fact is that parts of Warsaw had been designed and built by Italian architects, and decorated by Italian painters and sculptors sent for by the kings of Poland, and later by the Russian rulers

In Warsaw we were given rooms in the best of the few remaining hotels still in working order I remember the porter standing inside a sort of alcove, above which was the inscription *Schweitzer* (Swiss) In the old days porters were always Swiss, and the word 'Swiss' gradually came to mean porter Another recollection—a horrible one—stands out in my memory During the night I woke up, there was no electricity, and I lit a candle On the wall black winding serpentine rivers were slowly moving—thousands upon thousands of bed bugs Every house in the whole of Poland was infested with that vile pest.

In Warsaw we had several discussions with the medical authorities chiefly those of the newly created Ministry of Health The news they gave us was tragic, but occasionally a comic episode occurred

We were supplied with plentiful statistics, as is the wont with all ministries, even in their infancy, and found from them that the incidence of disease and mortality varied greatly from d[illegible]

[illegible]

numerous, in others very few, and in yet others there was none Further investigation revealed a rather surprising fact the districts with the lowest incidence of disease and mortality were those in which there were no doctors

As a member of the medical profession myself, I should like to ask the reader not to come to a precipitate conclusion, however logical it might appear, and to keep in mind that statistics may be used to prove anything The healthier districts were in reality those where food was less scarce and living conditions less appalling than elsewhere, whether blessed or not with the presence of doctors

CHAPTER VI

POLAND

POLAND, THAT GENEROUS country with such a long and tragic history, regained her independence in 1918, but the whole country was deeply scarred by war. Famine was rampant, and poverty everywhere, cholera, typhus, and relapsing fever ravaged many provinces.

The Polish Government approached the League of the Red Cross Societies, recently founded by the American millionaire and philanthropist, Henry P. Davison, and asked for medical help. The League jointly with the Supreme Inter-Allied Command, appointed a Commission of which I was a junior member, the senior members being Surgeon General H. S. Cumming for America, Lieutenant Colonel G. S. Buchanan for England, and Médecin Principal F. Bisbecq for France.

We travelled to Poland via Austria and I shall never forget a scene at Vienna station. The vast place was deserted but here and there one could see groups of ragged children who when they saw our train coming in all ran to the restaurant car, where we had just finished breakfast; they looked famished, emaciated, hollow-cheeked. A few coins were thrown to them by an American. The coins fell on the platform but the children made no attempt to pick them up; they cried: *Kein Geld, kein Geld. Brötchen bitte* — No money, no money, bread please!' We gave them all the bread we had.

We stopped in Vienna for a few hours and went for a walk outside the station. Entering one of the famous cafés we sat down at a table and asked for Vienna coffee. Who does not remember that wonderful black coffee topped with whipped cream of pre-war days? The concoction brought to us was certainly black and on top there was a certain amount of white powdery stuff the nature of which we were unable to discover; it looked and tasted very much like sawdust. The black liquid was a revolting infusion of roasted acorns and potato skins.

Poverty and misery everywhere stared one in the face, yet the gaudy music halls were crowded to suffocation.

Military Delegation headed by General Maxim Weygand There was a rumour that the Poles had wanted Foch, but that he had sent Weygand, his Chief of Staff, saying "He is as good as I am."

On August 11, 1920, a terrific battle was fought on the Vistula, twelve miles from Warsaw, the Russians were routed and retreated precipitously, closely pursued by the Poles, who chased them until they reached the heart of White Russia. The damaged railway line was quickly repaired by the Poles, and used to transport large bodies of troops to the rapidly advancing front.

The Commission was given a third-class carriage, it had wooden seats, and at the end of the carriage there was a sort of cubby hole for cooking All the first- and second-class carriages had been burnt by the Bolsheviks We were in the train for days on end The landscape was deadly monotonous—an interminable plain without the smallest change in contour, and everywhere mud, mud, nothing but mud As we approached the old Russian frontier thousands upon thousands of refugees and peasants were to be seen tramping along, carrying their few belongings and half sinking into the so-called roads—in reality shallow rivers of mud. It was a tragic sight.

The Russians soon asked for an armistice, which was granted, and in March 1921 the Treaty of Riga was signed It has been suggested in certain quarters that the victorious result of the battle for Warsaw was due to the scientific planning and wise advice tendered to the Polish High Command by the Allied Military Mission. It is not so In fact, in deciding to retreat all the way from Brest Litovsk to Warsaw and give battle there, Pilsudski ignored their advice. The glory of that battle—the Miracle of the Vistula—belongs to Pilsudski and his heroic troops, and to them alone

* * *

Polish hospitality is world renowned I remember that in Warsaw one of the few old families still in a fairly good financial position [illegible]

We visited a number of hospitals, and were rather surprised to find that men and women shared the same wards. In the centre of each ward was a towering stove of terracotta, and round it the patients congregated. Fuel—wood—was scarce, food scarcer, and drugs almost completely lacking; but a great deal of assistance came later with the American Red Cross. It was notable, however, that Poles of all classes, although most grateful to America, did not seem to feel any particular warmth or affection for the Red Cross doctors. The reason for this was that the Americans, with the best of intentions, had sent to Poland Polish-American medical men who were practically all Jews. The Jewish race, in my opinion, is the greatest in the world, and I firmly believe that a sprinkling of it in an Aryan country is good for that country—it acts as a stimulant, like spices in food—but too much may do harm. In Poland Jews were exceedingly numerous, and in many villages and small towns formed the majority of the population. But what a difference from the Western Jews! They were dressed in long, black, dirty kaftans, their hair unkempt and all of them bearded. The Poles looked upon them as inferior beings, almost like the untouchables of India.

Three months later, after visiting many parts of Poland, the Commission returned to Paris, where we wrote our report.

The following year, 1920, we again visited Poland. This time we went via Germany, it was at the time of the great inflation. One day, in the restaurant car of the train, luncheon was marked at 300,000 marks (in normal times it would have been five marks). The following day it was 600,000 marks, and by the third day it had risen to a million marks.

We stopped only a few hours in Berlin, and then proceeded to Warsaw Nearing the city, we heard in the distance the rumble of guns the Russians had invaded Poland, and were approaching the capital. It was a large army under the command of General Budieny, composed to a great extent of vast masses of Cossack cavalry

The reaction of the population was wonderful thousands of volunteers came forward, and everywhere inside the city trenches were being dug I saw one battalion composed entirely of women. They actually fought, and fought bravely.

General Pilsudski, who commanded the Polish Army and was Head of the State, had the benefit of an advisory French

CHAPTER VII

TEACHING IN LONDON, NEW ORLEANS, AND ROME

FOUNDATION OF THE ROSS INSTITUTE

AT THE END of 1920 I was demobilized, and was pleasantly surprised and deeply grateful at receiving the thanks of the Italian, British, Serbian, and Polish government authorities The Serbs honoured me with the Military Order of the Serbian White Eagle and the Civil Order of St Sava; the French Government made me an officer of the Legion of Honour, and the Polish Government gave me the Odrodzenia Order From Italy I received the Italian Military Cross and a civil decoration, but the honour which gratified me most of all was the honorary C M G graciously bestowed upon me by His Majesty King George V of England

I resigned my professorship in Naples and accepted the Lectureship of Mycology and Mycotic Diseases in the London School of Hygiene and Tropical Medicine

Here I may mention that in 1916, while on short leave from the Balkan war zone, I had become a Member of the Royal College of Physicians, I was excused several examinations, including the two most feared in those days, morbid anatomy and Latin (the latter is no longer required) Nevertheless, I felt horribly nervous—all my life examinations have terrified me

Henceforth my time was divided between teaching at the School, experimenting in the laboratories, and doing clinical work in the Ministry of Pensions Hospital at Orpington and at the Italian Hospital, where I had been appointed Visiting Physician In addition there was a rapidly increasing private practice in Harley Street I loved it all In Harley Street my old teachers, Sir James Cantlie and Dr Mitchell Bruce, placed a room at my disposal in their house, No 23 Soon afterwards I bought No 33, a very small house in the first block—possibly the smallest in Harley Street. Some years later, after the

and table were loaded with every kind of delicacy: caviare, salmon, anchovies, sardines, ham, eggs, and chunks of cold roast beef. Most of the guests fell voraciously on these delicacies, which had not been seen for so long, washing them down with innumerable small glasses of vodka, the fiery though satin-smooth spirit of Poland and Russia. I was in those days a teetotaller, so I drank tea made in the Russian way in a monumental silver samovar.

We were about to thank our host and hostess for their hospitality and leave, when the lady of the house said: "Well, now that your appetites have been whetted by the *zakuszka* (hors d'oeuvres), let us go in to luncheon." We were shown into another large room and asked to sit down to an enormous repast: it was a struggle to take even a morsel for courtesy's sake.

During our first visit to Poland the Prime Minister was Ignace Jan Paderewski, the celebrated pianist, a great patriot and a great man. He asked us to luncheon at his palace, and we gladly accepted. In one of the rooms there was a large grand piano, and I asked Paderewski whether he had time to use it often. "Never," he answered. "From the day I was appointed Prime Minister I have never touched the instrument, and as long as I remain in office I never shall. I want to concentrate entirely on my political work, to try and help my country."

There were several meetings in Warsaw of the newly created medical section of the League of Nations. The directorship had unofficially been offered to me some months before, through my friend and colleague Dr. Buchanan, but I refused because I was in those days (and still am) far more interested in clinical and laboratory work than in administration. So a Pole was placed at the head of the Medical Department, Dr. Reichman, an extremely able man and a born organizer.

Polish medical schools have a magnificent tradition, and even during those terrible years of war, famine, and pestilence the teaching went on and was excellent.

to have seen so many new things through the microscope." "Yes," was the retort, "but behind the eyes there must be brains"

When the Conference was over we visited various parts of Central America, where the Company had extensive plantations We found Honduras in the throes of a revolution, but it was a rosewater revolution, foreigners were not molested, and very few of the indigenous population were hurt. The two opposing armies, the so-called loyalists and the rebels, were organized in a similar manner—a plethora of generals, colonels, majors, and captains outnumbering the exiguous rank and file Revolutions in Honduras, and to a certain extent in all the other Central American republics, were in those days extremely frequent, and in Honduras a regular annual event.

I remember the delicious taste of the Honduras grape fruit, with a nuance of the taste of ripe grapes—hence its name. It loses that delectable characteristic when grown elsewhere

Next we went to Guatemala, and the whole time we were in Guatemala City there were earthquake tremors Because of the frequency of earthquakes there, all the houses are one-storeyed One day we went out of the city for a tour into the mountains We saw in the distance troops of peasants trotting down a hill, and I was greatly struck by their features they looked exactly like Japanese, but were in fact a tribe of local Indians

Finally we visited Panama I well remember the well kept narrow strip of territory on either side of the Canal, under direct American rule, and also the two excellent hotels run by the American *authorities* The management was most efficient, and intensely *patriotic* the proud American Eagle was ubiquitous, showing itself on every door, ceiling, and wall, embossed on every piece of crockery, incised on every glass, tumbler, and decanter, embroidered on every napkin, promi- [illegible]

[illegible]

to American engineering, *and* also to American medicine Its construction would never have been accomplished but *for the* work of Surgeon General Gorgas who [illegible]

lamented death of Dr. Mitchell Bruce, I bought 23, and still have it.

The first structural alteration I made in both houses was to build a laboratory next to the consulting room, so that from the latter I could reach the laboratory simply by pushing a swing-door. Practice in tropical medicine cannot be carried out properly without a laboratory, and it makes all the difference to be able to examine specimens on the spot during clinical examination of the patient

In 1920 I had the honour of being asked by the Royal College of Physicians to give the Milroy Lectures I chose as my subject 'The Higher Fungi in Relation to Human Pathology', and later heard that they were not without success. In 1922 I received the Fellowship of the College.

* * *

In the summer of 1924 the famous American United Fruit Company, which had a most excellent medical department under the directorship of Dr William E Deeks, organized an international conference on tropical health problems at Kingston, Jamaica, and I was invited We went to Jamaica in a very comfortable banana boat belonging to the Company

The Conference was a great success, and some of the world's most eminent scientists and physicians took part The papers, addresses, and discussions were most interesting The world-renowned Japanese scientist, Hideyo Noguchi, a member of the Rockefeller Institute, gave a thrilling address on the aetiology of yellow fever he had found a spirochaete (*Leptospira icterogenes*) which he proclaimed to be the cause of the disease The whole assembly concurred in his opinion and clapped enthusiastically after his speech Only one voice was raised in opposition, that of Aristides Agramonte Later researches showed that Noguchi, although supported by everyone, was wrong, and Agramonte was right: the spirochaete had nothing to do with the disease. We all make mistakes, but it was a terrible blow to Noguchi, who subsequently became very depressed and melancholic. A little later he went to Africa on a scientific expedition, and died there—of yellow fever He was a researcher of the highest class, a very pleasant man, and on occasion very witty Once a colleague of rather mean disposition and a bit of a failure, said to him: "What keen eyesight you must possess, Noguchi,

to have seen so many new things through the microscope" "Yes," was the retort, 'but behind the eyes there must be brains.'

When the Conference was over we visited various parts of Central America, where the Company had extensive plantations We found Honduras in the throes of a revolution, but it was a rosewater revolution, foreigners were not molested, and very few of the indigenous population were hurt The two opposing armies, the so-called loyalists and the rebels, were organized in a similar manner—a plethora of generals, colonels, majors, and captains outnumbering the exiguous rank and file Revolutions in Honduras, and to a certain extent in all the other Central Amer [illegible]

with a nuance of the taste of ripe grapes—hence its name It loses that delectable characteristic when grown elsewhere

Next we went to Guatemala, and the whole time we were in Guatemala City there were earthquake tremors Because of the frequency of earthquakes there, all the houses are one-storeyed One day we went out of the city for a *tour* into the mountains We saw in the distance troops of peasants trotting down a hill, and I was greatly struck by their features they looked exactly like Japanese, but were in fact a tribe of local Indians

Finally we visited Panama I well remember the well kept narrow strip of territory on either side of the Canal, under direct American rule, and also the two excellent hotels run by the American authorities The management was most efficient, and intensely patriotic the proud American Eagle was ubiquitous showing itself on every door, ceiling, and wall, embossed on every piece of crockery, incised on every glass, tumbler, and decanter, embroidered on every napkin, prominent and massive on the side of the bathtub and all other pieces of furniture in the bathroom

The Panama Canal will remain an imperishable monument to American engineering, and also to American medicine Its construction would never have been accomplished but for the work of Surgeon General Gorgas, who put into practice the discoveries of Ross and Manson in the field of malaria, and of Reed and his associates in the field of yellow fever Some years

previously a French company, headed by the celebrated engineer de Lesseps, who built the Suez Canal, had started work on the Canal, but it was a complete failure: malaria and yellow fever destroyed the immense labour force, and the enterprise had to be abandoned.

In this respect the following letter from Gorgas to Ross is interesting (the original was shown to me by Ross's secretary after his death):

Hyde Park Hotel,
Knightsbridge,
London, England.
March 23, 1914.

My dear Sir Ronald,

Before leaving England I wish to express the debt of gratitude we all owe to you for the great work you have done in the field of Tropical Medicine. As you are aware, malaria was the great scourge that incapacitated the working forces at Panama before our day. If we had known no more about the sanitation of malaria than the French did, I do not think we could have done any better than they did. Your discovery that the mosquito transmitted the malaria parasite from man to man has enabled us at Panama to hold this disease in check, and to eradicate it entirely from most points on the Isthmus where our forces were engaged.

It seems to me not extreme, therefore, to say that it was your discovery of this fact that has enabled us to build the canal at the Isthmus of Panama.

G. C. Gorgas

During these various peregrinations I had the opportunity to carry out some medical researches. It was during this trip that I first came across the condition which I later described as *Dermatosis papulosa nigra*, characterized by the presence of numerous small, black papules on the face; nearly half the Negro population had it. I observed also a rare disease of the mouth, *Stomatitis cryptococco bacillaris*, due to an association or symbiosis of a bacillus (*Bacillus vermiculoides*) and a fungus (*Cryptococcus graciloides*).

In Guatemala we observed many cases of onchocerciasis: several scattered tumours are seen on the scalp, and from time to time the patient has a violent attack of fever accompanied by

a bright red rash on the face, known locally as *erysipela de la costa*. Ocular complications set in, and finally the sight is lost. The condition is due to a filiform worm, the blinding filaria or *Onchocerca caecutiens*. Removal of the scalp nodules cures the blindness if it is not of too long standing.

During this cruise I met Dr C. C. Bass, Dean of Tulane Medical School in New Orleans, and we became great friends. A few months later, when back in London, I received from Tulane University (and this was certainly due to him) an invitation to accept the Chair of Tropical Medicine in their Medical School.

So in 1925 I went to New Orleans. I liked everything about that city, and I have never come across nicer people than the New Orleanians or the Louisianians in general. I was most happy at Tulane University and the Charity Hospital. In fact, I found everything perfect except the climate, which reminded me very much of Ceylon. Going there from the north you find, during the first few days, that you can hardly breathe; you feel tired and lethargic and in no mood for work, but you soon become acclimatized.

The New Orleanians are very proud of the old French Quarter which they call, if I remember rightly, the *Quartier Carré*. I was often asked by friends which part of the city I admired most, and they were not a little surprised and somewhat annoyed when I said the northern part which they referred to as the American section with its huge skyscrapers. They all expected me to [illegible] Louisiana, so named after [illegible] the exception of a period of [illegible] 1800 a French colony for many years. Napoleon sold it to the United States, and it was admitted to the Union in 1812.

I was in New Orleans during some terrible floods; they were somewhat frightening and it was only the stoutness of the dykes —called *levees*—which saved the city. The waters of the Mississippi were at a higher level than the city itself, and the steamships on the river seemed to be floating above the roofs of the houses. On one occasion the floods became so menacing that the dykes on the opposite side of the Mississippi were purposely cut so that the waters submerged enormous tracts of open land but the city itself was saved.

The Mississippi at New Orleans flows majestically down to

the Delta and the Gulf of Mexico. It is so wide that you can hardly see the opposite bank. To this day there is a popular belief that drinking the water of the Mississippi (which is always a yellow colour) will cure any number of diseases, but it must not be filtered. It is interesting to note that up to about the middle of the last century quite a number of the medical faculty held the same belief. In a paper published about the year 1850 in the *New Orleans Medical Journal*, the author emphasized the beneficial effects of the Mississippi water, especially in anaemia. He had also noticed that it had a stimulative action on the glands connected with the procreative function (he did not, of course, use the modern term 'endocrines'). In his article, that modern Aesculapius in all seriousness advised married men desirous of a large progeny to drink a glass of the Mississippi water regularly at bedtime, while warning bachelors to refrain from doing so lest it imperil their virtue.

I found the Americans—and especially the Louisianians—very friendly and most hospitable, but there was one great drawback to the delightful and absorbing daily life: a superabundance of speech-making. Even at a small private luncheon or dinner party, if the participants were more than four, at least one, more often two, and not rarely all of them in turn would get up and start speechifying with great gusto. The Americans are hard, energetic and successful workers, but it would appear that they have turned the old motto 'Acta *non* verba' into 'Acta *et* verba'. I had, of course, to follow suit, and laboriously began preparing and memorizing addresses and speeches to be given impromptu on the right occasions.

I found my audiences appreciative and, forgetful of the innate Creole kindness and politeness, I began to think that perhaps my lack of *genius loquendi* was not congenital and thereby incurable. Perhaps my abilities in this direction were merely latent—a smouldering fire which at any moment might burst into a gigantic flame.

The university in those days held an annual public dinner at which all the authorities and notabilities of the State and city were present, including the Governor, the mayor, and the Lord Chief Justice. The speech of the evening, traditionally a long, tedious address expatiating upon the activities and achievements of the university during the past year, was delivered by one of the professors—a new one each year. My turn

came I had worked hard and long on the speech, which I memorized by assiduously repeating it aloud every morning while dressing, so that when the great evening came I was proudly able to deliver it without a single note At the end there was prolonged applause "At last," I thought, "I have become a Demosthenes or a Cicero, or a St. Chrysostom with a golden tongue!"

I turned to my right, where the Dean of the school was sitting, and said to him *sotto voce* "Well, Mr Dean, were you pleased with my speech?"

In very audible tones he replied "Do you want to know the truth?"

"But of course"

"My dear Castellani, we all know that some years ago you took part in the investigation of sleeping sickness, which was proved to be carried and inoculated by the tsetse fly Now, with your speech, you have given us sleeping sickness direct, without the assistance of any fly"

I was in New Orleans during the disastrous financial crisis of 1929 six out of the eight banks of the city crashed within a week, millionaires became paupers overnight, and in the Charity Hospital people were admitted who were dying of starvation The crisis was even worse in the north But thanks to the hard work, grit, energy, and perseverance of Americans of all classes the crisis was overcome Within a very few years prosperity returned to New Orleans as well as to the rest of the States—a magnificent achievement

It is generally admitted that the cause of the financial crisis was the frenzy of buying rendered possible by the easy instalment system of paying for goods I am certainly no financier, but in my humble opinion this should be remembered now when we are again passing through an era of facile hire purchase and a happy go-lucky, 'never never' buying system

The crisis had ruinous consequences all over the world, even in Africa An American missionary, on sick leave for blackwater fever from Basutoland, told me that the repercussions there had been catastrophic. Prices had tumbled, affecting every native product and industry One result of the general slump was the fall in the price of brides While in normal times the cost of a healthy plump maiden had become practically standardized by tribal custom to two fat cows, immediately

after the American crisis it dropped to one lean calf; and if the young lady had the slightest blemish on her face, a mangy old goat would suffice to buy her.

* * *

For several years I continued to spend some months in New Orleans and the rest of the year in London, where, in 1923, Sir William Simpson and I had started a movement to found a research institute in honour of Sir Ronald Ross.

When Sir Patrick Manson retired in 1919 from the post of Medical Adviser to the Colonial Office, many people expected Sir Ronald would be given the appointment, but it was not so. The reason? Rumour whispered that the violent criticism of the Colonial Office which had for years poured from Ross's pointed pen and pungent tongue had something to do with it. Although a great admirer of Sir Ronald, I was never with him in his attacks on the Colonial Office in my opinion it had done wonders for the furtherance of medicine and hygiene in the colonies—at any rate, that was my experience in Ceylon.

Sir Ronald, after retiring from the Liverpool School of Tropical Medicine, had started a consulting practice in London. But his heart was not in practice he was really solely interested in research—and his financial position was not good.

The London School of Tropical Medicine did not offer him a lectureship, as was generally expected Sir William Simpson and I then conceived the idea of founding an institute for research with a hospital attached, in London, and calling it the Ross Institute. A committee was formed and a letter was published in *The Times* on June 22, 1923, asking for funds Among the signatories were Asquith, the late Prime Minister, two Viceroys of India, Lansdowne and Hardinge, the President of the Royal Society, Charles Sherrington, the President of the Royal College of Physicians, H D Rolleston, the President of the Royal College of Surgeons, A Bowlby, the Directors of the Pasteur Institutes of Paris and Brussels and the Director-General of the Public Health Service in the United States In a leader *The Times* strongly supported the idea

The response was magnificent A large house in Putney, surrounded by a garden, was bought and transformed into an imposing building containing well-equipped laboratories and

two airy wards The Institute was opened on July 15, 1926, by the Prince of Wales, its Patron, who pronounced a noteworthy speech for the occasion, part of which I quote

"The opening of this Institute, which I am very glad to perform, commemorates a definite achievement in the work which the British Empire has done for civilization Not the least important obligation which the development of that Empire has laid on the members [illegible]

is always fiercest in the tropics, where man, and especially the white man, is the continual prey of diseases from which we in this country are, comparatively speaking, protected by a more temperate climate, and perhaps the saddest page in the whole history of our Empire is that which tells of the terrible toll taken by plague and by fever of those who helped to build it

'Of all these tropical enemies malaria has probably been the most deadly and elusive But now, thanks to the achievement of one man whose name we are here perpetuating in this Ross Institute, its ultimate defeat is certain I can think of no other single discovery in recent times which will earn the deep gratitude of so many thousands of human beings of all nationalities as the discovery made in India by Major Ronald Ross—as he then was—on August 20, 1897 The story of its subsequent development and what it has led to is well known to you all I need only summarize it in the words of a famous writer 'It is not too much to say that Sir Ronald Ross has made a third of the world inhabitable' "

Sir Ronald was Director in Chief and Sir William Simpson Director of Hygiene, while I was Director of Tropical Medicine and Dermatology Soon afterwards a special department for Malaria Prophylaxis was established under the charge of Sir Malcolm Watson, a highly capable malariologist who had had unique experience in India and the Malay Peninsula Some years later, the Institute was partially absorbed by the London School of Hygiene and Tropical Medicine, and the Putney building was abandoned, quarters being found for the Institute in the School's monumental edifice in Keppel Street. It is still

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In Rome University I gave lectures daily, so that the total number was the same as if I had been there the whole year round I followed the same procedure in New Orleans

How was I able to carry out responsible work in three different countries year after year, one may ask? The reason is that during the whole of my career I have been exceedingly fortunate in my associates and assistants In my prolonged annual absence from Rome the work of the Tropical Clinic went on smoothly and well under Dr Igino Jacono, my first assistant, whom I had known and liked very much in my Taranto days, when we were both serving in the Royal Italian Medical Service I had other most excellent assistants Dr Amalfitano, Dr Acanfora, Dr Girolami, Dr Scotti, Dr Urso and many others

In New Orleans too, I was most fortunate in my assistants I may mention Dr Mendelson, Dr Turner, and Dr Schwartzwelder All of them have made good careers, and nearly all of them have become university professors

My techn[illegible] d and w[illegible] -liable, [illegible], and Mr Richard de Silva in Ceylon—the last a most remarkable worker I owe a great deal to them all

Nor did I ever experience any trouble with the nursing, clerical, or domestic staffs of any of the hospitals in which I worked, except that occasionally one or other of them, aware of my softheartedness, would vanish for a day or two and then send a *letter of* excuse—I have quite a small collection of these letters The excuses varied somewhat geographically A nurse in Uganda explained her forty-eight hours' absence from duty to being suddenly gripped by a frenzied urge to go *hippopotamus* shooting on Lake *Victoria* *In* Ceylon the most usual excuse from a minor clerk or laboratory attendant was the sickness of an aunt, the aunt seemed to hold a position of great consequence in the Sinhalese family On the other hand, the commonest excuse during my short period of work in Naples and Taranto in the *First World* War was the sickness of a grandmother, she held a unique place of respect and affection in the heart of the Neapolitan and Tarantine popular classes.

In *more* recent times, and in a highly civilized European country, a very young junior secretary—a prim, rather diminutive, bespectacled young lady—telephoned one morning asking

flourishing under the directorship of Professor Macdonald, ably assisted by Dr John Ford Tredre Ross, in a letter to *The Times* of October 18, 1928, generously expressed his gratitude to Sir William Simpson and myself, "by whose efforts," he wrote, "the Institute was founded"

In 1927 I had the honour of receiving the honorary K C M G from H M King George V Two years later I was made a senator of the Kingdom of Italy by King Victor Emmanuel III Both events gave me great pleasure

* * *

The work at the Ross Institute was so engrossing that for a time I had to abandon my post in America, especially as Tulane University (rightly, from their standpoint) insisted on my staying there nine months in the year instead of only four

After a couple of years' continuous work in England, I accepted the Professorship of Tropical Medicine in the newly-founded Medical School of Louisiana State University in New Orleans they were satisfied with a three-months' course in the year. I was as happy at the Louisiana State School as I had been at Tulane

In 1930 the Italian Government decided to create a Chair and a School of Tropical Medicine at the University of Rome, and I was approached, through the Italian Ambassador, and asked if I would accept the position I replied that I greatly appreciated the honour, but with so much work abroad I could not possibly accept They then put it to me as a patriotic duty, and I had to consent I must honestly say that they were extremely kind and generous The Minister for Public Education, Senator Giuliano Balbino, presented a Bill to both the Chamber of Deputies (which was still in existence) and the Senate, creating the Chair The Bill allowed the first holder to retain all his teaching posts abroad, provided he resided in Rome for a period of three months annually and organized the Tropical Department in such a way that it could continue to work during his absence

So I accepted the Chair, and from 1930 onwards I started the following routine nearly six months in London (from June to the beginning of December), three months in New Orleans (January–March), and three months in Rome (April–June)

CHAPTER VIII

PRACTICE IN HARLEY STREET (AND ELSEWHERE)

My practice in Harley Street, which extended over twenty years (1920–1940), was of absorbing interest. Not only did it enable me to combine practical work with scientific research, but it gave me an opportunity to make many acquaintances—to meet and know the famous of the land, and I was exceedingly lucky in that my patients usually became my friends

One of the best known was Sir Edward Marshall-Hall, the greatest criminal lawyer in England in the early 'twenties, whose name became famous all over the world He was a tall, rather massively built but distinguished looking man, clean-shaven and with silvery hair, he had a most intellectual face To him the classic description of Carlyle could be applied 'Surnamed

Although

not attract

We became great friends, and I once asked him how he felt when he was called to defend a criminal He answered "The moment I start defending him he is no longer a criminal to me, he is an innocent man

committed

Another of my patients about this time was Rudolf Valentino I was then at 33 Harley Street, an attractive but very small house with a tiny hall from which the consulting room was separated by a flimsy wall In those days I had no butler, and a maid answered the door

I don't think Valentino had made an appointment, which in Italy is quite a common occurrence He called, and the maid asked him to write his name and address in the patients' book

if I would allow her, *for the next fortnight, to come to the office* at ten instead of nine o'clock "The veterinary surgeon has informed me," she said, "that my pet nanny goat, which I have brought up by hand since babyhood is expecting She seems to be ill in the mornings and refuses her food unless I am there She is all right in the afternoons"

Her request was granted One morning a few weeks later I received a telegram marked 'urgent It read REGRET UNABLE ATTEND OFFICE OWING IMMINENT CAESARIAN OPERATION After a split second of shock, it dawned on me that the surgical operation referred to the nanny goat Three days later the young secretary resumed her work at the office, and showed me a snapshot of a frisky kid that had come into the world in the same way as Julius Caesar

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Although he had been a Member of Parliament, politics did not attract him. I was told by many of his friends that his real aspiration was a judgeship, but he never received it because, so it was said, he dabbled in spiritualism in his spare time. He never talked to me about this subject.

We became great friends, and I once asked him how he felt when he was called to defend a criminal. He answered: "The moment I start defending him he is no longer a criminal to me, he is an innocent man who is being persecuted."

Then I added: 'But suppose he has confessed to his crime?'

His reply was: 'People sometimes confess to crimes they have never committed.'

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I [illegible]

Ital [illegible]

ask [illegible] ne and address in the patients' book

placed on a small table in the microscopic hall. When she saw his name, she gave him a startled look of admiration and awe, went white to the lips, and slumped to the ground in a dead faint. Through the thin wall I heard the thump of her falling, and came out into the hall to investigate: Valentino helped me to carry her to a couch in the consulting room, where she quickly recovered.

I certainly don't know how it happened, but when Valentino left my house every door in the whole block of houses was thrown open, and out popped the heads of excited maids. He came to see me several times, and the same scene regularly occurred.

He was a fine, statuesque young man, muscular without being supermuscular, quite simple, not in the least conceited or effeminate. He had apparently tremendous sex appeal, and was the idol of millions of women cinema fans

Valentino suffered from frequent headaches When, on the first visit, I was about to examine his scalp, he asked me to wait a moment, and to my surprise removed a small toupee from the top of his head It was the most perfect toupee I had ever seen, and looked so like natural hair that I had not suspected it, it covered a circular patch of baldness which had been present for years Strangely enough, he made no secret of the fact to anyone, or—quite apart from the Hippocratic oath—I would not dream of mentioning anything that might dim his Apollo-like beauty in the memory of multitudinous lady worshippers. To this day there exists in London a Valentino Society, founded soon after his death by female admirers Once a year they leave flowers in the Valentino Ward of the Italian Hospital which was endowed by the Society

Poor Valentino died quite young in a New York nursing home after an operation for appendicitis He had a brother, whom he often brought to me to see professionally Some people saw a certain facial resemblance between them, but in the brother's case the good looks were completely spoilt by an unshapely nose After Valentino's death a well-known American film magnate decided to try to groom the brother to take his place. The first thing was to straighten his nose, and this was done by an eminent plastic surgeon But he had not the personality of Rudolfo, or his acting ability, and his career as a film star was brief and inconspicuous

Other patients of mine in the acting profession included Hilda Bailey, Constance Collier, Beatrice Lillie (Lady Peel), Matheson Lang, and the actor-playwright Ivor Novello

A most delightful visitor to Harley Street, of great intelligence and wit, was the famous Parisian fashion expert, Madame Schiapparelli, who used to bring her little daughter to me every year for a short period of treatment

Among painters, sculptors, and architects, three interesting patients whom I attended were Peter de Laszlo, Romano Romanelli, and Sir Herbert Baker, R A

Laszlo was a Hungarian who had settled in London and become the fashionable portrait painter of the 'twenties, he had painted all the society beauties and eminent men of his time I looked after him a number of times, and one day he suddenly said to me "I am very grateful to you, Castellani I shall paint your portrait." I was rather taken aback, but I realized the honour he was doing me I gave him three sittings, and liked [illegible]

[illegible] the honour

Romano Romanelli, the famous sculptor and Italian Academician, sometimes came from Italy to see me at Harley Street, being afflicted with a tropical complaint which he had contracted in the Far East He was the scion of a long line of Florentine sculptors, but as a boy, like so many others of his age, he felt a violent passion for the sea He entered the Leghorn Naval Academy, and in due course became an officer. Shortly after the First World War his impaired health forced him to [illegible]

[illegible] and become a sculptor?" He took her advice and went to work in Paris under Rodin and soon made a name [illegible]

[illegible] and an entertaining wit, he easily made friends among people of all stations After the fall of the monarchy Romanelli, an ardent monarchist, gave up all

his Italian honours and retired to his estate in Somalia on the River Giuba, where, instead of turning clay into statues, by his labours he transformed arid sand into lush fertile soil.

Sir Herbert Baker, the architect who designed the new Bank of England, was a tall, rather thin, somewhat nervy man. While I was on a visit to America he had a stroke, and when I came back to London half his body was paralysed. I went to see him, and found him in the depths of depression. To cheer him up I told him the story of Pasteur. "He also had a stroke," I said, "but he carried on with his work, and some of his greatest discoveries were made after that stroke. It will be the same with you." My little homily had the desired effect; his depression disappeared, and he went on with the designing and actual construction of the Bank of England and other public buildings.

Experience has taught me that a man at the top of his profession very often fails when he is asked to do something trivial. I wanted to transform a huge, old-fashioned, high-ceilinged room at the back of 23 Harley Street, my new house, into a small, sound-proof, two-roomed flatlet. I talked to Sir Herbert about it, remarking that it was too menial a job for him, and that I was asking a modest architect I had heard of to do it.

"But why call in someone else?" he said. "I will do it with the greatest pleasure."

He came a number of times to the house and directed the workmen very assiduously, but I must admit that the result was not entirely satisfactory. By some curious phenomenon the sounds in the two rooms, instead of being inaudible outside, were greatly amplified. It is the same in every profession. I am sure the common cold is better treated by a country G.P. than by a Regius Professor of Medicine of Oxford or Edinburgh.

Among the eminent statesmen and politicians whom I have known in the course of my career were Lord Reading, sometime Viceroy of India; a number of young men who were later to become prominent leaders in the world of politics, among them Captain Antony Head (as he then was, subsequently Minister of Defence), and a number of high colonial officers. Several famous admirals and generals consulted me professionally: best known of all was Lord Beatty. In reality he came to see me chiefly about his wife, an American who was a chronic invalid and had a permanent nurse in attendance. The Admiral often reminisced about the Battle of Jutland, where he had to

transfer his command three times from one battle cruiser to another, the last being, I seem to remember, the *Tiger* Although there had been a great deal of controversy in the press on the relative merits of Admiral Beatty and Admiral Jellicoe, who was in supreme command, I noticed that Beatty never uttered a word of criticism against the senior admiral He once told me that the German battle cruisers were much more stoutly built than the British ones, and this was also repeated to me by his son There has been a great deal of discussion about the Battle of Jutland, the Germans claiming it as their victory and the British as theirs, but there is no doubt that the victory belonged to Britain after that day the German fleet never left harbour

I liked and admired Beatty immensely I once mentioned to him, after he had shown me the souvenirs of his seafaring life, that many people regarded him as the modern Nelson "Nonsense," he replied very earnestly, "there has been only one *Nelson I am a mere pigmy in comparison with him*"

Throughout my life I have found all really great men to be humble

Lady Beatty was one of the more prominent aristocratic ladies who made Coué and 'couéism' fashionable in England in the early 'twenties Coué was a French pharmac[illegible]
noted that [illegible]
make up [illegible]
were most [illegible]
was a far [illegible] powerful therapeutic weapon than drugs He became an apostle of self suggestion "If you are ill," he used to say, "simply repeat to yourself frequently and convincingly Every day and in every way I feel better and better—and you will soon be cured" Through the influence of his powerful supporters Coué, though holding no medical degrees, obtained permission to give a demonstration of his methods at the Ministry of Pensions Hospital at Orpington This hospital, apart from two wards for tropical cases in which I was consultant, was used entirely for nervous cases—chiefly ex-soldiers who were suffering from shell shock and its consequences

Coué, followed by the group of lady admirers, entered one of the 'nerve' wards There were about a hundred men in it, all of them quiet at that particular moment He began talking to

his Italian honours and retired to his estate in Somalia on the River Giuba, where, instead of turning clay into statues, by his labours he transformed arid sand into lush fertile soil.

Sir Herbert Baker, the architect who designed the new Bank of England, was a tall, rather thin, somewhat nervy man. While I was on a visit to America he had a stroke, and when I came back to London half his body was paralysed I went to see him, and found him in the depths of depression To cheer him up I told him the story of Pasteur "He also had a stroke," I said, "but he carried on with his work and some of his greatest discoveries were made after that stroke It will be the same with you " My little homily had the desired effect his depression disappeared, and he went on with the designing and actual construction of the Bank of England and other public buildings

Experience has taught me that a man at the top of his profession very often fails when he is asked to do something trivial I wanted to transform a huge old fashioned, high ceilinged room at the back of 23 Harley Street my new house into a small, sound-proof two roomed flatlet I talked to Sir Herbert about it, remarking that it was too menial a job for him, and that I was asking a modest architect I had heard of to do it

"But why call in someone else? he said I will do it with the greatest pleasure

He came a number of times to the house and directed the workmen very assiduously but I must admit that the result was not entirely satisfactory By some curious phenomenon the sounds in the two rooms instead of being inaudible outside, were greatly amplified It is the same in every profession I am sure the common cold is better treated by a country G P than by a Regius Professor of Medicine of Oxford or Edinburgh

Among the eminent statesmen and politicians whom I have known in the course of my career were Lord Reading sometime Viceroy of India a number of young men who were later to become prominent leaders in the world of politics among them Captain Antony Head as he then was subsequently Minister of Defence and a number of high colonial officers Several famous admirals and generals consulted me professionally best known of all was Earl Beatty In reality he came to see me chiefly about his wife an American who was a chronic invalid and had a permanent nurse in attendance The Admiral often reminisced about the Battle of Jutland where he had to

and ill humour, and was always somewhat morose One morning at breakfast Lady Sybil's small dog happened to be under the table, and as it was in the way the Duke touched it with his foot, perhaps more forcibly than he intended The little dog started whimpering I looked across at the Ambassadress—her face had turned white. After breakfast I heard her murmur *sotto voce* "How republican one feels near certain royals!"—said in a moment of exasperation, of course, for the British Royal Family could not have had more devoted subjects than the Grahams. She also knew that the Duke, notwithstanding his occasional gruffness, had a heart of gold

His Royal Highness was very annoyed because at the wedding he had been placed after ex King Abdullah of Afghanistan, and I think he was justified in feeling aggrieved I heard his A.D C., an admiral, mutter angrily—referring to Abdullah "Think of that nigger being given precedence over the representative of the King of England."

There had been great discussion in the Chamberlain's office concerning the [illegible]

[illegible] long experience of court and diplomatic life, since he had served in the Austrian diplomacy at the time of Metternich. But, at the ripe old age of ninety nine, he was slightly past his prime He retired from office when he was 103 a pity he did not retire at ninety-eight, because rumour said the Duke of York never forgot the slight—although it was never in the least meant to be a slight.

Another disappointment that the Duke [illegible] ceiving the highest Italian [illegible] bers of which are styled ' [illegible] may be said to correspond to the English Order of the Garter H.R H could not receive the Order because it had already been bestowed on his elder brother, the Prince of Wales, and no two members of the same family may have it Instead, he received the Grand Cross of *San Maurizio e Lazzaro*, which ranks immediately after the *Annunziata*

I have always admired the Duke for his fortitude in regard to his speech impediment. I remember when, as a very young man he came to open the Tropical Hospital in Endsleigh Gardens it was painful to listen to him In Rome, all trace

one of them suddenly the man started to shout, flinging his arms and legs wildly about in a convulsive fit Immediately the whole ward followed suit It was a sad maniacal spectacle but one could not help seeing a comic element about it Poor Coué was terribly upset and apologetic, and the ladies were very disillusioned It was a gloomy party who left the hospital

On another occasion also his method of treatment failed—this time on himself On one of my many Channel crossings to attend meetings of the *Office International d'Hygiene Publique* in Paris, I was sitting in the ship s saloon about ten yards from Coué The sea was very rough, and I noticed that he was gradually getting paler and paler, and then distinctly greenish He was clasping his hands together firmly, an exercise he always recommended in moments of crisis and his lips were moving unceasingly I suppose he was repeating his slogan over and over again "*Ça va mieux ça va mieux* To no avail Suddenly and without warning he was violently sick

I have known and attended a large number of diplomats of many nationalities I had the greatest admiration and affection for Sir Ronald Graham Ambassador to Rome, and for his wife Lady Sybil Graham and was their guest every year at the Embassy when I gave my course at Rome University He was a very able and efficient ambassador although his detractors hinted that he was not over fond of hard work he worked in his office only in the mornings and spent the afternoons playing golf But a man should be judged by results and no British Ambassador has ever carried out such a difficult and delicate task more successfully He and his wife were on friendly terms with Mussolini who used to say of Lady Sybil Graham ' She is my ideal of an Englishwoman She was certainly a wonderful person, tall and slim and graceful and endowed with vivid intelligence She was the daughter of Earl Broderick and had been Maid of Honour to Queen Mary Her kindness of heart was immeasurable and the poor of Rome adored her for her charitable work

During Sir Ronald s term of office the then Duke of York (later King George VI) stayed at the British Embassy on the occasion of the wedding of the future King and Queen of Italy, at which the Duke represented his father Many people regretted that the Duchess had not accompanied him to the wedding, he appeared to be in a perpetual state of discontent

Grandi, the most brilliant of a long line of Italian Ambassadors to the Court of St. James's, was very popular in England. The Embassy became the finest in London, for he beautified the rooms with a number of masterpieces from the Italian state galleries, which hung on the walls of the salons where memorable parties were given.

At the beginning of 1939 Grandi fell into temporary disfavour with Mussolini, and was informed that his term of ambassadorship was at an end and that he would be sent to the island of Rhodes as its Governor. He did not relish the idea at all, and asked me whether I did not think that the climate of Rhodes might impair his health. I quite agreed that, after such a long sojourn in foggy London, a semitropical climate might be somewhat harmful to his nervous system. My medical report was transmitted to the Duce, and Grandi was then appointed Minister of Justice, and soon after President of the Chamber of Deputies as well. How Fascism degenerated in later years! The same man at once President of a theoretically freely elected Assembly and a member of the Government!

* * *

Before I had the honour of knowing him and becoming his medical attendant, I had heard the following remark about Marconi: "He does not resemble a genius in the least, he looks like a sedate, phlegmatic, fairly well-dressed bank clerk." Certainly no one could have looked less like the traditional genius of fiction—with burning eyes, an angular face, and disreputable clothes. Yet he was a genius in the truest sense of the word.

Marconi had no university education and held no university degrees. Apart from having listened occasionally, as a member of the public, to the lectures of the famous physicist, Professor Righi of Bologna, he had never received any theoretical training. I heard from his assistants more than once that he often brought forth ideas which they thought impracticable, but which, when carried out under his direction, invariably worked. He himself often told me that on discovering something new he would say to himself: "Why has this idea come into my head? What's the basis of it? Well, I'll carry it out in practice, and someone else will find the theory."

Apart from his genius and his modesty, Marconi held my

of stuttering had gone. Through sheer will power and continuous exercises over several years, constantly encouraged and helped by his wife, he had overcome the defect like the Athenian Orator of Antiquity.

The American Ambassador to Italy in the late 'thirties was Phillips. He was a career man, and most popular in Rome. After so many years I think it is permissible to make public a conversation we had which he never asked me to keep secret. In 1939, on one of my visits to Rome, he called me to his office. He knew I was attending Mussolini professionally, and asked me to persuade him to have a personal meeting with the President of the United States, the suggestion being that Roosevelt and the Duce should meet in two men-of-war in mid-Atlantic. Phillips gave me the clear impression that he had received definite instructions from Washington to take this step.

Unfortunately Mussolini would not hear of it. It was a great pity that he always held such a wrong opinion of the British and Americans. Britain, he was convinced, was in a period of rapid decline—finished, and America he judged by those tourists in Rome who showed a tendency to an over-appreciation of alcohol, and whose female relatives were possibly a little flirtatious and too desirous of having a good time. Nothing would induce him to believe that the vast majority of Americans were steady, hard-working, warm-hearted men and women, fond of family life.

The Italian Ambassadors in England from the early 'twenties until the Second World War were patients of mine. They were all outstanding men and distinguished diplomats. One of the earliest was the Marchese della Torretta, the chief architect of the Anglo-Italian Treaty by which Southern Somaliland was ceded to Italy. He was always opposed to Fascism although he had served as Minister for Foreign Affairs in the first Mussolini cabinet—but in those early days every patriotic Italian was behind Mussolini. Later, when he saw that the Duce was pruning the powers of Parliament and becoming more and more of a dictator, he resigned. Many years later, after the fall of Fascism, he was made President of the Senate, and greatly helped me during the period of political persecution which raged immediately after the war. I feel the deepest gratitude to him, and sincere friendship.

enthusiastic The Faculty unanimously proposed Marconi for a Chair As usual, some bureaucratic difficulties arose, but all obstacles were swept away by a memorable public letter written by Corbino, in which he said that the University of Rome must have the honour of claiming among its teachers Guglielmo Marconi it should not follow the miserable example of the University of Bologna, which refused the Chair of Italian Literature to Gabriele D'Annunzio

Marconi died suddenly in Rome, in 1937, from angina pectoris. I was in America at the time, and the news grieved me deeply We had been close friends for many years

* * *

Both in my Harley Street practice and abroad I saw and came to know a large number of royalties In the early 'twenties the Duke and Duchess of Aosta and their sons were often in London and frequently consulted me One of the sons, Amedeo, future Viceroy of Ethiopia, I admitted to Sister Greet's nursing home at Putney The matron told me that every morning, when she went into Amedeo's room, she would find him standing on his hands with his feet in the air, moving around the room in that not very dignified position He and his brother were always full of life and fun

About the same time I had another young patient in the Putney nursing home—Prince Henri of France, son of the Count of Paris. He was of a *much* more sedate temperament than Amedeo, and Matron used to say of him approvingly "Such a nice young boy, so quiet and studious You never see him with a novel in his hand, only tomes of philosophy, theology, and mathematics."

But boys will be boys One day I found Amedeo and Henri sitting close together on a sofa in the common room in earnest confabulation. I did *not* disturb them, but later Amedeo told me that they had been discussing and comparing the malodorous (he used a stronger word) feet of some of their august parents' courtiers.

Among the many royalties I have known and treated, King Umberto of Italy, the Infante Alfonso, King George II of Greece, and Don Juan of Spain stand highest in my esteem The Infante's three sons—Alvaro, Alonzo, and Ataulfo—were

admiration for another reason: although he was often urged to give up his Italian nationality, he refused to do so and remained an Italian subject A lesser man might easily have acquiesced, especially as for years Marconi met with only opposition and ridicule in his own country it was in England and America that his discoveries were first appreciated

Marconi and I held a similar opinion on the naturalized tribe we felt little regard or admiration for them, since such people usually change their nationality for personal gain We greatly admired and respected the genuine article—a Briton born and bred in Britain With all his defects he is still far above most other nationalities, but we did not find attractive the swarthy alien who in middle age suddenly blossoms forth into a fair Anglo-Saxon

Even in later years, after he became famous, Marconi never gave himself airs or displayed any sort of pomposity, although showered with honours, he remained simple and modest to the end. King Victor Emmanuel III of Italy made him a Senator when he was only forty, the youngest age permissible, and a few years later he was created a *Marchese* King George V of England bestowed upon him the honorary G C B and he was a Nobel Laureate He told me that, of all his titles and honours, the one he appreciated most was being a Senator of the Kingdom of Italy.

In those days the Senate corresponded, in a way, to the House of Lords, but the dignity was only for life, and was not hereditary During the Fascist period the lower Chamber was deprived of practically all power, but the Senate retained a certain amount of influence, and discussions were frequent and free, except that any criticism of the Government was not reported in the press Even in the 'forties the Senate still had some authority, for instance, in 1942 it quashed a ridiculous Bill concerning the organization of the army on Fascist lines

It is not generally known that in the year 1934 Marconi was given a professorship in the University of Rome in his heart of hearts he had always regretted that he had never been connected with university life or held any degree It is a great satisfaction to me that I initiated the academic movement which led to this event, I knew well the Dean of the Faculty of Science, Parravano, and the most prominent member of that Faculty, Senator Corbino I approached them, and they were

I was called in as a tropical disease specialist to exclude the possibility of some tropical complaint, and indeed some of the symptoms might easily have suggested sprue, especially the enormous amount of colourless intestinal excretion But I never had any doubt that it was cancer The official diagnosis given was cirrhosis of the liver

When Queen Marie, who had a keen sense of humour, heard of it she smiled and said "*Alors il doit y avoir une cirrhose hépatique non-alcoolique, parce que je n'ai jamais bu une goutte d'alcool dans ma vie*" ["Then there must be a non alcoholic cirrhosis of the liver, because I have never in my life tasted alcohol"] The poor lady died a few months later in a clinic near Vienna

In 1932 and the following years my consulting room saw a number of Indian and Far Eastern potentates, among them the Maharaja of Mysore, the Maharanee of Travencore, and His Highness Hamad Theudia Pengiran Besar Mogul, the Sultan of Brunei Borneo

The Sultan had a young cousin heir to a minor sultanate, who sometimes accompanied him to Harley Street in the charge of an English tutor It was interesting to listen to the tutor's views on the deplorably low morals of his subjects to be. They were not laudatory According to him not a single inhabitant of the country was exempt from gonorrhoea, regarded as a sign of puberty which would remain a normal physiological condition throughout life

This young cousin was affected with a peculiar complaint he was madly attracted to fair women Whenever he saw a blonde girl his eyes would start out of his head, and he would begin jerking up and down on his heels like a marionette [illegible] door to him one day when the butler was off duty The moment the young man set eyes on her he was carried away by her ash blonde hair and blue eyes Immediately he began jumping and twitching and continued his St Vitus's dance all along the corridor as she led him to my consulting room It was an unforgettable spectacle But for the stern measures of the tutor, who decided to discontinue the visits to Harley Street, that maid might today have been a Sultana

During the late 'twenties I was often consulted in Harley Street by a noble lady whose name I will not divulge She was

at Winchester School during 1928–29, and I occasionally had to go and see them for some slight complaint. Later they went to Switzerland and all became civil engineers, taking their degrees at the famous Zurich Polytechnic. Their mother, the Infanta Beatriz, was a granddaughter of Queen Victoria; she was endowed with looks, brains, and many accomplishments—and a sparkling sense of humour. One of her sisters was Queen Marie of Roumania; another was married to the Grand Duke Kyril, heir apparent to the Russian throne.

In 1932 and '33 I was called to Paris to attend King Alexander of Jugoslavia, who was staying with the Queen at the Ritz Hotel. He was suffering from a chronic complaint, about which his son King Peter III talks in his interesting memoirs. King Peter mentions that his father had the habit of continually placing his left hand on his abdomen, as if in discomfort. He *was* in discomfort, due to a persistent colitis. I isolated the germ (which had infected also the bladder) and this is still in my collection; it is called *Bacillus madampensis*, an organism closely allied to the dysentery bacilli. I prepared a bacterial vaccine which gave him a great deal of relief.

After the first consultation, His Majesty graciously asked me to lunch with him and the Queen. I noted with interest that his personal servant was a rough-looking, stubble-faced old Serbian peasant—quite different from the polished, twice-daily-shaved, precisely tailored personal valet of most royalties. In his eyes shone the faithfulness of a dog and the determination to defend his master with his life, if need be.

In 1937 I was summoned to see Queen Marie of Roumania at Sinaia. We were quite a number of doctors—about ten or eleven consultants from various countries, the majority French and Austrian. First we saw the patient in groups of two, and then we had a general meeting in a salon, in a corner of which King Carol presided, on a throne and in full regalia. The court doctor, a most polished gentleman—his enemies maintained that he was a better courtier than doctor—opened the discussion on the diagnosis. He made a short graceful speech, saying he wanted each of us to state our opinion quite frankly: "But of one thing I am sure," he added. "None of us will ever think the disease is cancer." Nobody at Court wanted that diagnosis to be given. Unfortunately it was the correct diagnosis—the Queen was suffering from cancer of the pancreas.

complained that it was not sufficient His tastes were luxurious He seldom resided in his wife's opulent mansion as he was passionately fond of travelling, and he always chose the most expensive cosmopolitan hotels

While big game hunting in Central Africa, he contracted a tropical disease for which he came to consult me in London The treatment entailed a long period in a nursing home, and during this time a friendly acquaintance sprang up between us Later we quite often dined together at a West End grill room, as he didn t mind having dinner after 11 p m (my work was never finished before then, and as for lunch, I very seldom had any)

I rather liked him, but not with any real warmth, too often an uncomfortable creepy feeling would assail me when near him. Perhaps it was his conversation He was inclined to talk about gruesome subjects, and was very interested in forensic medicine. He would ask how poisons acted, how they were detected in the human body after death, and whether certain signs of violence could be traced at the post mortem examination Once he said "Suppose a person is lying in the bath, and someone suddenly pushes his head under water Would it be possible at the inquest for the pathologist to discover whether drowning was caused by sudden heart failure or foul play?"

I detested this type of conversation, and always tried to change the subject by [illegible] cine was not [illegible]

This man [illegible] whom he usually stayed when in town. She was the widow of a well known continental aristocrat who had left her some money which in the brother's opinion, she did not know how to administer He complained that she would never take his advice She had no children and made him her heir

A few weeks after the conversation on drowning, I was in America. Opening the paper one morning, I was struck by a headline in huge letters EUROPEAN ARISTOCRATIC LADY FOUND DEAD IN BATH SUDDEN HEART FAILURE

The lady was his sister To this day, though I fight against the thought and endeavour to convince myself there was no crime (the poor fellow died long ago), I confess that a horrible doubt arises in my mind whenever I think of the event.

a great friend (platonic) of a princeling who lived in a modest villa in the southern Riviera He was the direct descendant of the ruler of a microscopic dukedom which many years previously had been devoured by a powerful neighbour, but he still tried to keep up the appearance of the old court, with its pomp and strict etiquette, and made himself somewhat ridiculous in the process He was quite a charming young man—rather delicate-looking, fair-haired, blue eyed, unmarried, and endowed with many excellent qualities—but there were whispers attributing to him some abnormal tendencies

The lady in question was very often invited to his dinner parties and receptions during his frequent visits to London, and was frightfully annoyed if she did not receive an invitation When invited, she always gave him a step up in the hierarchy of titles and referred to him rapturously as "The divine Grand Duke of ——" (the small town over which his ancestors held sway) When she was not invited, on the other hand, his rank was reduced and she referred to him disparagingly as "That stupid Count of Sodoma"

* * *

I knew Lord Beaverbrook fairly well, and several times had the pleasure of dining at his house, where on one occasion I met a young woman whose beauty, intelligence and artistic gifts were the talk of London Lady Diana Cooper I also met there the fabulous Lord Castlerosse—corpulent, boisterous, very witty His personality did not particularly attract me, while I admired his employer, Beaverbrook, for the stupendous vitality, keen intellect and unique courage which make him one of the great men of the age

* * *

One of my patients was the youngest son of an old noble family, a quiet man in his late thirties, with distinguished manners but very little money He had married a wealthy foreign lady many years older than himself and made no secret of the fact that he had done so for financial reasons While grateful for the punctuality with which he received his monthly allowance as agreed in the marriage contract, he nevertheless bitterly

complained that it was not sufficient. His tastes were luxurious He seldom resided in his wife's opulent mansion as he was passionately fond of travelling, and he always chose the most expensive cosmopolitan hotels

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CHAPTER IX

MUSSOLINI

THE MOST INTERESTING patient I ever had was Benito Mussolini

At the end of October 1925 while in London I received a telegram asking me to go and see him in Rome I arrived late in the evening and was met at the station by one of his secretaries, who told me that the Prime Minister wanted to see me at his house the following morning he was living at number 153 Via Rasella a house belonging to Senator Tittoni So the next day I went to Via Rasella The street was old and badly kept, and the house itself far from palatial I asked the concierge on which floor the Prime Minister was living and was told with, I thought a touch of disdain the top floor "*Le soffitte*"—the attic—he said The ancient lift was out of order, so I began climbing the stairs they seemed never-ending, but at last I arrived at the top landing and rang the bell The door was opened by a middle aged modestly dressed maid who had been with the Prime Minister for years and was the only servant in the house Her name was Cesira Carocci She looked pleasant and intelligent but there was certainly nothing smart about her She said You are Professor Castellani? The Prime Minister is waiting for you And she ushered me through the extremely unpretentious low ceilinged apartment to his room

Mussolini was sitting at a table piled high with papers He looked pale and drawn and on the floor by his side I noticed a basin in the basin there was blood The poor man had been vomiting blood a few minutes before I arrived and I could see that it was with the greatest effort that he remained sitting upright instead of lying down

He looked very ill and I said Your Excellency you had better go to bed immediately I examined him and came to the conclusion that he had a duodenal ulcer a conclusion that had already been reached by the many doctors who had been called to see him in the previous two or three months I found,

in addition, that his liver was enlarged, although he rarely drank alcohol, and there were other signs of hepatitis, he had had dysentery during the First World War in the trenches, and the hepatitis was probably a result of that. I insisted on his going to bed, and put him on a strict diet with alkaline treatment

I went to see him again the following day he was apparently much better, and refused to stay in bed I continued these daily visits for about a week, and during this time he talked to me on all manner of interesting subjects In those days there was no sign of the dictatorial, Caesar like face of the man of later years no jutting chin, no bulging staring eyes, it was instead the face of a very intelligent, keen young man, with a rather kindly expression On the third or fourth of my visits, he was at his table and I was sitting on a small dilapidated sofa, when he suddenly got up from his chair and said "Well, Castellani, now I must practise my violin" He went to a cupboard, brought out an old, cheap-looking fiddle, and, pacing up and down the room, began playing He made a horrible screeching sound, and said rather ruefully "I know I play frightfully badly, but I enjoy it and find it very relaxing" After some five minutes he stopped and replaced the violin in the cupboard

We talked on many different topics Once he remarked "When one has to make a big decision, it is a mistake to weigh too much the pros and cons, and it is an even greater mistake to ask the advice of too many people I have always found that when I stick to my own horse sense things go off satisfactorily, when I cogitate too much, or listen to many councillors, the result is often failure." He added "A drawback of the present régime is that I am asked to decide about *minutiae* A few days ago the Under Secretary of State for the Interior informed me that a committee appointed by him had resolved to change the uniform of the prison warders but they could not come to an agreement as to whether the jacket should have three buttons or four I had to decide"

Once the talk was about the navy (*marina* in Italian), which was seldom exercised at sea in order to economize fuel. "How foolish," he said "How can naval officers and crews be trained in land locked harbours? The *Marina* will soon be kno[illegible]

Smoking and alcohol came under discussion more than once. Mussolini never smoked, and drank very little—a small glass of wine at meals, and then only occasionally. He once said: "There are too many *mescite di vino e liquori* [small shops where wine and local spirits are served at all hours] in Italy. And that is why on Sundays the villagers and peasants so often quarrel and knife one another, and the number of homicides is so appalling. I shall give orders to the *prefetti* to restrict licences sharply."

But he was no fanatic, and always after his anti-alcohol tirades he would add: "In the land of Enotrio people must have their wine." He ridiculed American prohibition laws.

On another occasion he began talking of English colonies, and of India in particular. Like so many Italians then, before, and since, he was imbued with the belief that British colonialism (odious word) was extremely harsh and severe. He also firmly believed that England was becoming senile, that she had entered upon the descending phase of her parabola, and that her descent must continue inexorably. On my declaring that British rule in Ceylon, where I had lived for so many years, had



The wedding of King Farouk's sister to the Shah of Persia. King Farouk leading into dinner the British Ambassadress, the present Lady Killearn

Outdoor dental dispensary.

Mussolini with the African forces. On his right, Marshal Bastico

He had no idea whatever of the temperament or character of the average Englishman, and he was not alone in this Many politicians in Italy failed to realize the complete freedom of speech and of the press that existed in England, and that anyone was at liberty to write to the papers supporting the most ridiculous cause What they saw in a letter written by some crank to the editor of a newspaper they quite sincerely believed to be the general opinion of the country

There were, however, one or two English people for whom Mussolini had the greatest respect and admiration, foremost among them were the British Ambassador and his wife, Sir Ronald and Lady Sybil Graham

Cesira Carocci his servant, carried out my instructions to the letter, particularly the dietetic instructions and after a week Mussolini was very much better and the pain had disappeared, the liver too became practically normal Cesira used to send me a confidential report every morning, usually written on small scraps of paper, in which the Duce was referred to as 'Signorina Elvira' She did this because the press and public were continuously on the look-out for news of the patient

On the third of November I found him so much better that I asked permission to return to London, to which he agreed In the late afternoon, before leaving for Paris and London, I received a short note from Cesira to the effect that 'Miss Elvira' wished me *bon voyage*, was no longer suffering pain, and was most grateful to me The message ended "She hopes, however, that you will come and see her again soon" I still have the note

Cesira was a most faithful servant, devoted to Mussolini and his family, and for many years she kept in touch with me Before entering the Duce s service she had been in the service of the famous poet Gabriele D Annunzio, and she would tell many amusing stories about him He was a great poet and a great patriot, but a terrible *poseur* and lover of the limelight He was also the most spendthrift of men, he lived in fabulous luxury and was permanently floundering in a morass of debts which, however, never perturbed him He knew that when he reached the point of complete submergence a benevolent government, protector of the arts and letters, would come to his rescue He considered himself a sort of Greek demigod, and his domestic staff was organized on Parnassian lines The housemaids, all

of refined appearance and dressed and coiffured in Greek style, were 'Olympic Ancillae', each of them with a classical name bestowed by the poet Cesira was Euphrosine—the Grace of Joy

Mussolini was at that time well aware of the persistent rumour that his illness was of luetic origin, and very much resented it I could not find the slightest sign of lues He asked me whether it would be possible to have a blood analysis made in England, and I said of course it was So certain was he of the absence of lues that he requested me to publish the result in the papers! I collected some blood and took it with me to London, where I had an analysis made at two different laboratories Both were *completely negative* He was *in a great hurry* to hear the result, and wrote me the following letter

> "Caro e Illustre Professore, Mi piacerebbe di sapere i risultati della Wassermann Vado meglio No ho piu il dolore al fegato Cordiali e deferenti saluti " *

I still have the letter it is in his own handwriting on a sheet of paper headed 'Benito Mussolini, *Collare della Santissima Annunziata*', and is dated November 7, 1925

I sent Cesira a wire to inform 'Miss Elvira' that the blood *test was absolutely negative, and then* wrote to him direct I did not communicate the result of the analysis to the press as he desired, for obvious reasons, but I acquainted a number of people with it

In 1926 Mussolini moved from Via Rasella to Villa Torlonia where *he was later joined by his wife, Donna Rachele* She had been in Milan until that time Villa Torlonia was a beautiful place, but it was run on very unpretentious lines and there was no show of any kind

In November 1926 before sailing for my annual visit to America I saw and examined the Duce at *Villa Torlonia* He was feeling very well, riding and jumping every morning at the Torlonia Park, and having daily fencing lessons with a celebrated master At these lessons he insisted that both he and the master should fight without head protection much to the master's disinclination He was then having ordinary food but

* I should like to know the result of the Wassermann test I am better and no longer have severe pain in the region of the liver Kind and deferential [?] regards

he was a very small eater, always in a hurry over his meals, which never lasted more than a few minutes He was much annoyed at the continual alarmist statements which kept appearing in the foreign press about his health, and wrote the following statement for publication

> "Il Prof Castellani, che è un grande medico e che stimo moltissimo, passando da Roma *è* venuto a visitarmi, come fece già altre volte Mi ha visitato alle ore 9¼ Ero tornato dal lavoro Ero di umore eccellente Il medico mi ha visitato prima del pranzo e mi ha trovato benissimo Il mio pranzo è durato esattamente tre minuti primi cronometrati dal professore *coll'orologio* alla *mano* Il Prof Castellani mi ha visitato dopo ed è giunto alle stesse soddisfacenti conclusioni di prima Mi sento bene Il Prof mi ha trovato *ringiovanito* ed è la verita Sia detto a tutti coloro che si interessano della mia salute " *

After 1926, I saw him professionally at least two or three times a year until July 1943, I never saw him after that I was

puppet of Germany

Mussolini detested the thought of getting old—all his life he

Fascist hymn was called *Giovinezza* (Youth), and its stirring notes were to be heard whenever the youth of the nation congregated

I remember that in October, 1942 one of my assistants, while taking down Mussolini s medical history at Villa Torlonia, asked him his age, and how annoyance was immediately depicted

* "Prof Castellani who is a great doctor and whom I greatly esteem in passing through Rome came to visit me as he has already done on previous occasions. He came at 9.15 in the *evening* I had just returned from my work. I was in excellent humour He examined me before dinner and found me in very good health. My dinner lasted exactly three minutes timed by the Professor with a watch in his hand Prof Castellani examined me again afterwards and came to the same satisfactory conclusion as before I feel well. The Professor found me *rejuvenated* And it is so This may be told to all those who are interested in my health."

on his face (he was then fifty-nine): after his fiftieth birthday he had given orders that the anniversary of his birth should *never, in future*, be celebrated or mentioned. It was never referred to in the newspapers. He gave similar instructions about other feast-days. In Italy, as in most nations of the world, but perhaps more exuberantly, the custom flourishes of sending greetings at Christmas and New Year as well as at Easter and many other occasions. The Duce was buried under avalanches of 'best wishes' expressed in telegrams, letters and cards. "This nonsense must be stopped," he said. "The time spent by well-wishers and self-seekers in writing, and by myself and my secretaries in replying, should be employed for more useful purposes." So instructions were sent out to that effect—and they were obeyed. Mussolini was not the only gainer. The knowledge of the Duce's edict caused the habit to wane in all classes, to the relief and benefit of the hard workers and busy men who had little time to spare for such civilities.

It is tragic that Mussolini should have come under the influence of Hitler in the end; and the interesting part of it is that at first he disliked him intensely. I did not know Hitler personally; I was merely introduced to him once at a reception at the Palazzo Venezia, when he visited Rome, and in common with most of my countrymen took an instinctive dislike to him. I could never understand how that small, insignificant-looking man with the 'Charlie Chaplin moustache' could sway, by his long-winded oratory, the great German nation. Hitler was a cruel man to whom human life meant very little. Mussolini, on the other hand, was not by nature a cruel man; and I was always told by the Chief of Police, Bocchini, who was a patient of mine, and also by Grandi, that he had absolutely nothing to do with the assassination of Matteotti, the Communist deputy, in the early 'twenties. The murder was committed by a handful of violent Fascist gangsters. In every political party there are people to whom might be applied the saying: *Plus royaliste que le roi*. Even the so-called persecution of the Jews in the late 'thirties, when Mussolini was already under Hitler's thumb, was extremely mild and in no way comparable to the German one. The Jews in Italy were not only tolerated but liked; they were Italians and were treated as such, and intermarriage was not rare. (Jews in Rome had also been treated well under the popes even in the Middle Ages, though they had to wear a

yellow cap) A number of Jews regarded the whole thing as a joke, they had many friends among Christians and the clergy, and a good few of them asked to be baptised A celebrated Jewish friend of mine (I have never lacked friends among that great race) told me the following story

A young Jewish acquaintance of his became engaged—as was not at all unusual—to a Christian girl of very good family, but with no money My friend said to his young co-religionist "But surely you are not going to marry that girl? Why, everyone knows she has no dowry " "I know," he replied, "and I have passed many a sleepless night pondering the problem, but she has a much bigger dowry than mere money at the present time Her uncle is an Archbishop "

When, in the late 'thirties, German women were forbidden by Hitler to wear make-up or paint their nails, I asked Mussolini what he thought about it. He answered "Anything that enhances the beauty of a woman should be encouraged Lipstick and rouge will never be banned in Italy I thoroughly approve of make-up "

I reiterate Mussolini was not the inhuman monster that Hitler was and it was only German pressure that made him perform that one horrible act of inhumanity at the end of his life, when he refused to reprieve Ciano and the others who had been condemned to death by the special Tribunal of Verona Grandi one-time Minister of Justice, told me several times that Mussolini was quite soft hearted and that it was a job for him, as Minister of Justice, to get him to sign the death sentence in the very few cases in Italy in which capital punishment was applied (only to criminals who had committed more than one murder)

Mussolini was very fond of [illegible] his eyes filled with tears He adored his children, although he realized that, with the possible exception of Edda, they had not his brains. But they were all of them nice children of normal intelligence I liked best the youngest one Romano, he had a very affectionate nature. I still have a picture postcard which he sent me from Riccione when he was four years old and on which he wrote *Baci al caro Professore* (kisses to the dear Professor)

The children, of course, went to a State school, and Mussolini

once told me he noticed that his eldest boy, who was about eleven or twelve, was getting ten, the highest mark, in every subject. The boy was constantly ten in Italian, Latin, mathematics, history, natural science; in fact, everything. Mussolini came to the conclusion that this was being done by sycophantic masters because he was the Duce's son. So he called for the headmaster, and said to him: "Either you treat my son like any other boy, or I shall have you transferred to Sardinia or Libya." No more full marks after that—they dropped to between four and seven.

Once when passing through Rome I called on Mussolini at the Palazzo Venezia His office was an enormous room, *La Sala del Mappamondo*, where it was a long walk from the door to the Duce's desk. We talked of many things, and then he said, "I feel quite well, but I should like you to have a look at me." I readily assented, but pointed out that there was no sofa or couch for him to lie on "Easily remedied," said the Duce, and proceeded to move inkstands, books and papers from his massive desk, and put them on the floor Then, taking off his coat and waistcoat, he lay full-length on the desk, and in that unconventional position I examined him I doubt whether any other dictator has used his writing-table for a medical check-up

There is no doubt that Mussolini, in a certain sense, suffered from an inferiority complex. Both Grandi and Balbo told me so, and I noticed it myself Although he pretended to give the impression that he was proud of his plebeian origin—his father was a village blacksmith—he felt envious of people who came from the upper bourgeoisie and had had a university education. In his heart of hearts he could not forget that in the First World War he was a mere private who rose to corporal, while Grandi and Balbo were officers. They told me that it was because of this inferiority complex that he constituted the *Militia*, as a sort of opposition to the Royal Army, and created the title 'Field Marshal of the Empire', bestowed only on the King and himself.

Like many other leaders of men, Mussolini had an imposing number of ladies who were greatly attached to him.

The last of these was Claretta Petacci, destined for a tragic end. For months it was not clear whether Claretta or her sister—both equally attractive—was going to be the chosen

one, and a few malicious individuals proclaimed that they would share Caesar's favour. Their family name, in Roman plebeian language, is a word indicating certain natural human phenomena the discreet medical term for which is flatus—and a vulgar but ominous joke began to be heard more and more frequently that Fascism would blow up and end with two such cognomens.

En passant, I cannot help admitting to a certain feeling of admiration for poor young Claretta, who stuck to the man she loved when she could so easily have saved herself by denying him.

To recapitulate, one may say of Mussolini that during the first fifteen years of his power he did a vast amount of good: order was restored, magnificent roads and harbours were constructed, hospitals built, new universities opened. A memorable achievement was the draining of the Pontine Marshes, thereby rendering the country surrounding Rome healthy, where for eighteen centuries it had been the seat of pernicious malaria and death.

A great historical feat was the Lateran Pact, by which peace between Church and State was restored; it was signed on February 11, 1929 by Mussolini for Italy and Cardinal Pietro Gasparri for the Vatican.

But power is heady wine, and few men in history have been strong enough to withstand its intoxicating action for long. Mussolini began well, continued well for a number of years, and ended badly, bringing ruin and destruction on his country, and opprobrium and hatred upon his name. The final tragedy was to allow himself to come under the sway of Hitler.

* * *

The Duce had a brother, Arnaldo, editor of the Milan newspaper *Il Popolo d'Italia*, founded by Mussolini himself before the First World War. I looked after him several times in Rome, and once in Florence. He was as calm as Benito was ebullient, and had a most beneficial, restraining influence on him. Although the Duce's brother, he remained simple and unassuming, one of the most delightful men I have ever known. He never got over the death in 1929 of his eldest son Sandro, a boy of twenty-one, whom he adored, soon after he developed heart trouble,

and died suddenly in Villa Torlonia on December 21, 1931 It was a fierce sorrow to Benito, and a great loss "I have lost my only friend," he is reported to have said, "and the only man in the world I could trust"

I often attended Mussolini's wife, Donna Rachele, and had the greatest respect and admiration for her In the middle and late 'twenties she was still quite young, with beautiful golden hair and a lovely complexion She was in perfect health until in 1926, certain symptoms appeared which made her doctors suspect incipient lung trouble I was called from London to see her, and suggested that she should go for a couple of months to Merano, a part of the Austrian Tyrol ceded to Italy after the First World War The Tyroleans are German by race, and they were pleasantly surprised when they saw Donna Rachele They expected the Duce's wife to be a typical Italian matron, plump and dark, and appreciated her northern looks and fair hair

Later I saw her many times at Villa Torlonia when visiting her husband She was a charming person, and, though coming from a humble family, very refined She was devoted to her husband When he was on a diet, she used to go into the kitchen and prepare the food herself, and there I would often find her, peeling potatoes, boiling milk, or concocting some simple dish for the Duce Her qualities of wife and mother were exemplary, but she also had another quality which evoked in me great admiration the average woman in her position would have expected to be thrust into the limelight, she would have expected her place to be immediately after the Queen (and quite possibly immediately before) Not so with Donna Rachele, she always kept in the background and it was quite exceptional to find her at a public function On the few occasions when she was seen in public, she was always quietly dressed and unostentatious, and her manners were perfect

Donna Rachele had great intelligence and plenty of common sense, and her powerful though indirect political influence was always used to further some good cause I remember mentioning to her the advisability of medical students receiving a more practical training before being let loose on the country as practitioners The Italian university curriculum was excellent, but, as in all universities, theory took precedence over practice My efforts in that direction with the Minister of Education had always been without effect A few months after my conversa-

tion with Donna Rachele, I was in the Senate when the Minister introduced a Bill instituting the 'State Examination for Medical Practice' The M D was no longer sufficient, the young doctor had to do a further year of practice in hospital and then pass his State Examination I was delighted to cast my vote in its favour, and the Bill was passed by a large majority

Once Donna Rachele was seriously ill at Riccione, on the Adriatic I travelled from Rome with the Duce in his special train He talked about the history of medicine with great knowledge He was especially interested in the *Scuola di Salerno*, which was closed at the beginning of last century after a long and historic existence On arriving at Riccione we went straight to the house and I saw Donna Rachele, she was suffering from a serious form of anaemia I remained there for several days, staying at a small hotel nearby, and gave her some injections of campolon, a liver extract, with excellent results Although she was pale and weak, she insisted on continuing to prepare the simple meals for her husband

Several times I attended her children professionally, especially her daughter Edda, a most intelligent girl, but rather abrupt and therefore not very popular She married Count Galeazzo Ciano on April 24, 1930

I attended Ciano a number of times Like his father in law, he always showed great fortitude and high spirits when he was ill, and would never admit to pain He was *au fond* a nice fellow, although, again like his father in law, he could at times be extremely rude His intelligence was quick, but he was much too young for the post of Minister for Foreign Affairs Moreover, he liked to be surrounded by young people the youngest men ever to be made ambassadors were appointed by him, and all the key people in his ministry were far too immature—they were boys and many of them behaved like boys I remember a man who had been a secretary at the Italian Embassy in London during the First World War bemoaning his misfortune in the diplomatic service He said "When I entered the service as a youth it was age that was respected, so for years I had no promotion Now that I am no longer a young man, Ciano is Foreign Secretary and everything is reversed it is youth that holds the power, and we older men receive no promotion The result is that I am still a secretary " Soon afterwards he resigned

It was rather amusing to go to the Ministry for Foreign Affairs in Ciano's time. When I was in Rome, I often had to give him vaccines for a mild but chronic digestive complaint from which he suffered, and when I could not go myself I sent one of my assistants. We were shown into a large ante-chamber and asked to wait. In this room there was invariably a galaxy of beauties of all types, and of the most different social strata Another person frequently seen waiting was a well-known fencing master. Ciano was very keen on fencing—in this also aping his father-in-law—and had lessons every other day in a room next to his office; the office itself was a beautiful old room in the Palazzo Chigi.

I do not believe for a moment that Ciano made money out of his position. People were always talking about it, but if you went to his house—and I did several times when he was not well—you could see that it was not at all a palatial place. It was an ordinary, rather uncomfortable flat in a modern quarter of Rome. I well remember his being ill in bed there, holding court in his bedroom, surrounded by the *grandes dames* of the Roman aristocracy, while the salon was full of young members of his Ministry, laughing and joking The ladies liked Ciano very much, and were exceedingly jealous of each other, but whether the attraction lay in his mental qualities, his physique, or simply his position, remains a matter for conjecture. Whatever the reason, he had a host of lady admirers, and was always surrounded by beautiful women In his behaviour with women at dances and dinner parties Ciano, I must say, was far from dignified. The Duchess of Sermoneta, in her book *Sparkle, Distant Worlds*, described it perfectly "His usual method of approach to women was exaggerated familiar chaff, accompanied by a great deal of pawing, never serious conversation; and if he encountered the slightest opposition he became absolutely dumb." The same lady, who was one of the leaders of Roman society, found Mussolini, on the contrary, always easy and interesting to talk to

I am quite certain that Ciano's influence with his father-in-law has been greatly exaggerated, and the impression he tried to give in his *Diary* of having sway over the Duce was no more than wishful thinking on his part Indeed, of one thing I am absolutely certain: he was terrified of his father-in-law. I remember very well a certain day at the Palazzo Venezia when I

had just seen the Duce professionally On my way out I met Ciano in the corridor and started talking to him A liveried attendant approached and told him that Mussolini was waiting to see him I have never seen anyone look more scared than that young man as he ran towards the Duce's room

Another thing of which I am perfectly certain is that Donna Rachele disliked him intensely (I am talking now of the late 'thirties), first because he was giving too much time to society and wild gambling, and secondly because he had a German nurse for his children She used to say of the nurse "That German woman! I'm sure she's a spy!" Donna Rachele never had much sympathy for the Germans

There was a rumour that Edda, his wife, was not really the offspring of Donna Rachele, but of a Russian princess with whom her father had had a liaison Edda's enemies used to say that the rumour was encouraged by Edda herself, as she rather enjoyed the idea of being a princess's daughter Of course she was Donna Rachele's daughter, and her mother was very fond of her, just as in her own way she was very fond of her mother

Ciano was a brave young man, and in the Ethiopian War he conducted himself with valour He behaved also with dignity and stoicism at the horrible Verona Trial in 1944, when he was condemned to death for treason, and his father-in law, notwithstanding the entreaties of Edda, refused to pardon him From that day Mussolini lost the last vestige of affection anyone still had for him

The Italians have many defects, but, like the Spaniards and the Portuguese, they are great lovers of children "Those poor *bambini* are now fatherless," they said of Ciano's children, "and it is their own grandfather who has made them so" It was reported by a Japanese journalist who interviewed Mussolini at the time that he would not pardon Ciano because he wanted to play Brutus of Ancient Rome destroy the enemy of the State, even if he be of your own family—*salus republicae suprema lex* I doubt it. Much more probably it was because he did not dare to disobey German orders

Edda, too was a brave young woman, and showed it when the hospital ship on which she was working as a Red Cross probationer was torpedoed and sunk She was rescued from the water quite calm and collected

CHAPTER X

ETHIOPIAN WAR

In March 1935, I was in Rome giving my annual course at the university, and I had among my patients the Minister for the Colonies, Alessandro Lessona. He was a very young man to be a minister, but he had all the qualities of a good statesman; moreover, he did not become conceited, nor did he try to ape the Duce and his mannerisms, as did so many others. I used to go and see him regularly at his office in the Ministry. He was an insatiable worker, on the go from early morning till late at night.

One day he had a message for me. The Duce had told him that war with Abyssinia was certain "We were beaten by the Abyssinians at Adowa in 1896," the Duce had said, "and we must wipe out that disgrace We fought that battle with white troops; therefore our vindication must be carried out with white troops. However," Mussolini continued, "I am told there is great danger in sending large masses of white soldiers to fight in a tropical zone they die like flies from the climate and disease. Ask Castellani if he would be willing to be put in charge of the medical organization of the whole expeditionary force—army, navy, and air I am convinced they must be under one single direction Castellani, I feel sure, will comply with the wishes of his King and Government, and when we recall him on active service as Surgeon-General he will not refuse"

The following day I saw Mussolini, and he was very pleased to find me willing I have been much criticized in certain quarters for accepting the job, but there was really no alternative: I was on the Reserve of Medical Officers, and therefore under military law. Moreover, I felt that it was my duty to use whatever tropical experience I had for the benefit of the hundreds of thousands of my young compatriots who were about to go and fight in Africa. One serious fear worried me I might lose my post at both the London School of Tropical Medicine and the Louisiana State University in New Orleans—and, of course, my private practice might disappear for ever These two institu-

tions, however, behaved most generously, and allowed me leave of absence for a year And my patients remained faithful to me

Within a few days Lessona and I departed for Eritrea for preliminary orientation work We embarked at Naples on a small, fast steamer for Alexandria, then overland to Suez, where an Italian destroyer was waiting to take us to Massawa, and from Massawa we proceeded to Asmara At that time General De Bono was Governor and Commander in Chief he was a fine old gentleman with a fresh complexion, deep-set, rather piercing eyes, snow white hair, snow white moustache, and a square sno[illegible]

While we were at Asmara he gave a dinner party at Government House, and I recall that one of the guests was the Archbishop of Eritrea—an Abyssinian, and as black as coal I sat next to him at dinner, and found him a most interesting and cultured man He had been educated at the Ethiopian College in Rome, which is situated in the gardens of the Vatican He was very pro-Italian, but that night he had a grievance "When I am in Rome and call at the Vatican Palace," he said, "a guard of honour composed of a platoon of Swiss Guards is lined up to salute me. Here, when I call at Government House, there is merely one solitary sentry to render the homage due to an archbishop"

[illegible]

[illegible] statue of a soldier pointing towards Abyssinia, and the inscription read "Italians remember we died for our country, and one day cancel this defeat by victory"

After a two-week stay in Eritrea we returned to Italy, where I immediately started superintending the medical organization for the expedition Remembering the experiences I had had in Macedonia in World War I, and knowing that many parts of Eritrea and practically the whole of Somaliland were malarious —certain areas extremely so—I made up my mind that I would concentrate on quinine prophylaxis, although at the time the scientific fashion was to belittle it, giving importance only to

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During the next few days in Rome I rushed between the Ministries of War, the Colonies, the Navy, and the Air Force, and also had talks with the Red Cross authorities Then I proceeded to Naples and embarked on a hospital ship, the inspection of these being one of my duties In contrast to her sisterships she was a fast boat, and we arrived in no time at the Suez Canal and the Red Sea. I visited and inspected all our ports and medical posts on the southern part of the Red Sea coast, and on the coast of the Indian Ocean down to Chisimaio at the mouth of the big, crocodile infested Juba river There I moved to another hospital ship, the *Cesarea*, on which H R H the Princess of Piedmont, future Queen of Italy, was serving as a Red Cross nurse She was known as Sister Maria di Savoia. She was treated like any other nurse, and did her work with great efficiency

The Princess was very keen on tropical medicine, and in Rome before the war had attended the courses which I gave to the medical students at the University Clinic for Tropical Diseases. In one of the lectures I had explained the differential diagnosis between madura foot and verrucose elephantiasis of the foot, and their totally different causation madura foot is caused by a fungus, and tropical elephantiasis by a worm, *filaria* which is carried by a mosquito

The *Cesarea* put into a place called Obbia, and I went ashore As I knew the Princess was keen on seeing tropical cases, I asked the doctor in charge of the local hospital to collect a few typical ones for her to inspect the following day Next day the Princess went ashore with Marchesa Targiani, two other nurses, another doctor and myself At the hospital the doctor in charge, forgetting in his excitement her command to be called Sister Maria, said "*Your Royal Highness*, I have a most wonderful case of madura foot which I am sure will interest you"—and he brought forth the patient. Sister Maria looked at the huge, knobbly hypertrophic foot "This is not madura foot," said she, "it is elephantiasis *verrucosa*." The doctor's face was a study of bewilderment and consternation, he looked entreatingly at me, but I could not help him, because it was a case of elephantiasis verrucosa.

Quite a number of soldiers believed the Princess to possess thaumaturgic powers. At Chisimaio, on a hospital ship anchored not far from the *Cesarea*, there were a number of

anti-mosquito and anti larval measures These latter measures cannot be carried out when one is dealing with an army perpetually on the move

Having decided on quinine prophylaxis, the first thing to do was to see that there was sufficient quinine In Italy at that time quinine was a State monopoly, so I interviewed the director of the monopoly and asked how much of it they had in stock He gave me the figures, adding, somewhat tartly, that it was quite enough Well, it might have been sufficient for Italy in ordinary circumstances, but it was certainly not sufficient in the event of a tropical war Having been given *carte blanche* by the Government, I persuaded the rather displeased bureaucrat to purchase further large quantities of quinine from the Dutch, and throughout the campaign we were never short of that essential drug

The actual war started on May 5, 1935 De Bono made a successful advance into the Tigrai and occupied Axum, after which there was a prolonged lull in the operations Many Italians lacked confidence in De Bono as a strategist, so Mussolini decided to send Marshal Badoglio to make an inspection and report Lessona and I were to accompany him In Italy there was great popular enthusiasm for the war, and the three of us had a fervent send off from Rome—conquering heroes in anticipation

Unlike many senior army officers, Badoglio firmly believed that medical preparation was all important, and for this reason I was with him the whole time during his trip of inspection in Africa It was an interesting experience accompanying him—he riding a fine black charger, and the entourage (including Lessona and myself) on mules—in the Adowa Mountains, where the famous battle had been fought Badoglio had taken part in that battle as a young artillery officer, and gave us a fascinating lecture, pointing from his horse to the various hills, peaks, and mountain passes, describing vividly the various phases of the battle

Badoglio made a thorough inspection of the line, the military organization and the distribution of the troops, and then returned to Italy accompanied by the Colonial Minister and myself He reported favourably on General De Bono's strategy, and I must say that he never gave me the impression of wanting to supersede him

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Quite a number of soldiers believed the Princess to possess thaumaturgic powers. At Chisimaio, on a hospital ship anchored not far from the *Cesarea*, there were a number of

wounded, and one of them developed very high fever through sepsis (there was no penicillin at that time) He was desperately ill, and in his delirium kept calling for the Princess, crying out that only she could save his life Maria José, hearing of this, insisted on seeing the man, and, accompanied by me, crossed over in a small launch to the other ship She was taken to the patient and, going up to him, gently placed her hand on his burning forehead *It may have been coincidence, but his de*lirium ceased immediately, and within twelve hours the fever had disappeared

I remember an amusing incident at this time War material was arriving in enormous quantities but, I noticed, very little hospital material, although I knew that in Naples, the port of collection and embarkation, there were mountains of it The G O C of Supply and Embarkation—naturally enough, in a way—was concentrating on war material He was a typical, crusty, Piedmontese officer of about sixty, rather short of limb, with a thin, wrinkled, reddish face, a small white moustache (*à la* Badoglio, or toothbrush style), and thick white hair cut short *en brosse* He was not considered over intelligent, and had the reputation of being a martinet

One day he received the following telegram from the Minister of War in Rome, possibly inspired by a person far away in the [illegible]rching sands of Somalia "From today and for the next ten [illegible]ys, drugs and hospital equipment take precedence of em[illegible]ation and dispatch over ammunition and other war [illegible]al"

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[illegible]ey can[illegible]uld not realize that for final victory drugs and [illegible]eneral [illegible]una were as essential as guns and ammunition [illegible]quipmen[illegible]tle [illegible]ign press, he would have found the daily [illegible]ead the for[illegible]a the "The Abyssinians may not beat and [illegible] the di, but disease certainly will" And that statemen[illegible] accompaal foundations

[illegible] Italian Army [illegible]d favour command was Rodolfo Graziani I [illegible] solid historic [illegible]he never was often at his H Q He inspired a [illegible] [illegible]ally different type from Badoglio,

personally, I preferred the latter Graziani was somewhat excitable, and would on occasion fly into a raging temper for no [illegible] age But *en fond* [illegible] selves to African [illegible] t after the Battle of Neghelle, while crossing a desert zone, he saw a young Abyssinian of about seventeen or eighteen lying abandoned by his comrades behind a bush Graziani had the boy picked up and put into his car, and brought him to a field hospital. The poor boy, affected with dry beri beri, was in a pitiable condition—a skeleton except for his swollen feet. With good food and thiamin he recovered, and thereafter followed Graziani about like a faithful hound

I am well aware that about two years later, when an attempt was made on Graziani s life, seriously wounding him, the retaliation was terrible That retaliation was ordered by violent, infuriated members of his entourage—it was *not* through his orders, for he was unconscious for over a week, and for the rest of his life he carried in his body hundreds of small splinters of the bomb

Graziani was certainly a notable general in colonial warfare, and the Somali native troops—the legendary Dubats—adored him although there were very few native troops, the policy, for reasons already mentioned, being to use only white men

I liked General Graziani, and it was a real grief to me when seven years later, in September 1943, he abandoned the cause of the King to become a republican and follow Mussolini and the Germans.

From the southern front (Somalia) I had often to go to the northern front (Tigrai and Eritrea), where Badoglio had replaced De Bono Sometimes I went by sea via Massawa, more frequently I went by air, in military 'planes These aeroplane trips were rather exciting because we had to fly over the whole length of unoc[illegible]
I remember [illegible]
have enough [illegible]
make a forced landing even if we don't crash in these stony mountains, we shan't survive long the Abyssinians don't usually bother to take prisoners. And the few they take they mutilate'

I frequently went to Eritrea and Asmara, where my good

wounded, and one of them developed very high fever through sepsis (there was no penicillin at that time) He was desperately ill, and in his delirium kept calling for the Princess crying out that only she could save his life Maria José, hearing of this insisted on seeing the man, and, accompanied by me, crossed over in a small launch to the other ship She was taken to the patient and, going up to him, *gently placed her hand on his* burning forehead It may have been coincidence, but his delirium ceased immediately, and within twelve hours the fever had disappeared

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The general, I was told later by his A D C, nearly had an apoplectic fit His face became first very red and then ashy white With eyes bulging and face twitching he finally exploded "*What* are those damn *people* in Rome up to? Do they think they can win the war with quinine and castor oil?

The general did not realize that for final victory drugs and hospital equipment were as essential as guns and ammunition Had he read the foreign press *he would have found the daily* recurring statement "*The Abyssinians* may not beat and destroy the Italian Army, but disease certainly will And that opinion had solid historical foundations

In Somalia the general in command was Rodolfo Graziani I came to know *him well, as I* was often at his H Q He inspired great confidence, but was a totally *different type from* Badoglio,

In my opinion Badoglio was a great general and a great man And I liked him also for another reason—he never lost his temper or self-control We were once talking about that army pest, the 'shouting officer', and he told me the following story When he was a young lieutenant in Africa one of his brother officers started yelling and cursing at an Askari, a native soldier The Askari listened in silence for a while, then, standing to attention, said very respectfully in a quiet voice "Your honour is shouting, therefore he is in the wrong"

Of one thing Badoglio was proud that he had never held an appointment at court or been an A.D C It pleased him to think that he was not a drawing room general At H Q he always had his meals in the general mess and mixed freely with the officers he commanded He was most punctual for meals, and was fond of telling amusing stories at the table, but never vulgar ones One of them concerned the time when he was ambassador to a small American republic. He saw, guarding the entrance to the principal port when he arrived to take up his duties, a small, rusty, dilapidated, very ancient torpedo boat with a decided list, on her bows in bold letters her name was written, *O terror do mundo* (*Terror of the World*)

After he had spent some months as ambassador to this same country, a revolution broke out. The head of the revolutionary party called on Badoglio and asked him secretly to instruct his secretaries and other members of his staff not to enter a certain street of the city on a certain date and hour, because that was the street the rebel troops would take in their march to occupy the central telegraph office Badoglio remarked "But if you take that route, you are not likely to encounter the government troops" "Exactly," answered the leader of the rebels, "that is just what we want, we deplore bloodshed The moment we occupy the telegraph office we shall inform the world that the present government has capitulated—and it will capitulate without a blow being struck." The marshal told us another story about the bombastic way in which the citizens of that country in those days referred to their mighty military forces Talking of the cavalry, they always multiplied the number of their cavalrymen by four On being asked why they did this, they explained that it was because a horse has four legs

After Graziani's victory at Neghelle in Somalia, and Badoglio's victory at Makalle in Tigrai in April 1936, the way to

friend General Guzzoni commanded and was Governor, he was one of our best generals and an extremely kind man He always asked me to stay with him at Government House, and helped me much with regard to facilitating the medical organization in various parts of Eritrea As a small token of gratitude for his many kindnesses, I later named a fungus after him he was delighted, and to this day often enquires after the health of *Trichophyton guzzonii*

In March 1936, while I was on a visit to Asmara, a messenger arrived at H Q one morning with the news that, about sixty miles to the south, a sudden infiltration of irregular Abyssinian troops had taken place During the night they had surrounded a post composed of large huts in which about eighty Italian road labourers were sleeping In a separate small hut were a road superintendent and his wife Apparently, being so far behind the front, they had thought it unnecessary to post guards during the night The Abyssinians silently surrounded the place, entered the huts, and massacred all the inmates, including the engineer and his wife As soon as the message was received, troops were sent to the place I arrived a few hours later The bodies had been placed in a long row on the ground they were naked, and all had been evirated An officer took a photograph of the macabre scene, it is still in my possession

Badoglio, on succeeding De Bono, made his headquarters in the conquered Tigrai He inspired confidence in everyone and although sixty eight, had a constitution of iron, he always rose very early in the morning and went about inspecting the various units He did not like office work, and only twice did I ever see him sitting at a desk—once at sea when the weather was very rough, and the other time at Makalle when he was feeling seedy and depressed, and I had been called from Somalia to see him He was talking of resigning 'Nonsense," I said "I'll prescribe a tonic medicine that will put you right in no time Take a tot of whisky every day at sundown "

Whisky was unobtainable in the Tigrai and extremely scarce in Eritrea, so a military plane flew to Port Sudan on the Red Sea, where, as in every self respecting British colony, that 'tonic medicine' was plentiful The 'plane came back with two cases of 'Black and White', and the treatment was a great success Badoglio was not a drinker, although like most Italians he liked a glass of wine at meals, and he was a very moderate eater

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with Badoglio and others at the aerodrome to meet him As he descended from the aircraft, Badoglio stepped forward and they embraced They looked for all the world like the closest of friends, and nobody could have told from this meeting that a few years later they were to become the bitterest of enemies

Badoglio left for Italy the following day He wanted me to accompany him, but I had received orders from Rome to stay on for another few weeks to supervise the civil medical organization of the newly founded Empire, proclaimed by Mussolini on May 9, 1936

Graziani at first followed Badoglio's ways He allowed us to intermingle socially with the French and British *corps diplomatique*, and continued his predecessor's habit of taking meals in the general mess

It was during this period that a certain incident occurred at the mess A colonel from one of the South American republics was paying a visit, he had been sent by his government to study and report on the strategy followed by the Italian Command He gave himself tremendous airs, boasting incessantly of the military prowess of his country, her mighty army and invincible navy One day, by an oversight on the part of the mess director, he was placed on Graziani's left instead of on his right—to which, as a foreign guest, although only a colonel, he was entitled I watched him he ate absolutely nothing throughout the meal, and his face was a picture of unfathomable misery In the afternoon he wrote a letter to the Chief-of Staff, complaining bitterly of the slight It is really extraordinary how sensitive some people are over *placement* I have known eminent and illustrious individuals become unhappy, taciturn, and dyspeptic when they were allotted a place at table below their expectations One developed jaundice

After a few days Graziani stopped coming to the mess and had his meals in the dining room of his villa, where he asked the Chief-of Staff and me to join him He also gave me a very comfortable room in the villa Until then I had been sleeping in the recently built Imperial Palace (the new Gebbi), which had been sacked by the rabble before our arrival It was quite an imposing building, but the furniture—what remained of it—was in poor taste, and the plumbing was deplorable I slept in the Emperor's room, and had the honour of resting on his

Addis Ababa lay open from two sides There were accusations in the foreign press that in the Battle of Makalle Badoglio used poison gas he did not After this battle the Abyssinians fled in extreme disorder A large motorized column was at once formed by Badoglio, and within a few days Addis Ababa was entered by the Italians (May 5, 1936) How those Engineer Corps fellows succeeded in transforming a narrow mule path, zig zagging across towering mountains, into a passable road for motorized vehicles will always remain a mystery to me It was a marvellous feat of engineering

Addis Ababa, when I was there, was a sprawling city with several hills thickly covered with very tall trees of the eucalyptus family The seeds, I was told, had been sent from Australia many years before as a gift to the Emperor Menelek

At Addis Ababa I had a pleasant surprise I discovered that one of the two American hospitals run by an American religious body for the benefit of the indigenous population was in charge of an old student of mine from Tulane University, in New Orleans He had been in Abyssinia, with his wife and child, for two years I lunched with him, and he told me that, in the interval between the retreat of the few Abyssinian regular troops and the entry of the Italians, his house had been raided for two days by the rabble, which went for all 'whites' regardless of nationality Only the British Legation was not molested it was guarded by a company of Indian troops, transported there from Somaliland before the war started

The young doctor proudly showed me his hospital, it was beautifully kept One thing struck me I was surprised to see that men and women occupied the same ward, a repetition of what I had seen many years before in Poland The doctor told me that 'co existence' did not lead to unpleasant complications Among the patients, I remember a terrible case of lock jaw in an Abyssinian youth I could not help admiring the fortitude of that young man ghastly contractions and excruciating pain tortured his body, but never a moan escaped his lips Anti tetanus serum saved him

I was at Addis Ababa when Graziani came to succeed Badoglio, who was feeling very tired and desired to go home It was at Badoglio's suggestion that Graziani was made his successor as Viceroy of Ethiopia and Commander of all the military forces Graziani arrived by 'plane from Harrar, and I was

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immense four-poster bed under a canopy bearing his coat of arms, the lions of Judah. The first few nights were not very restful: sniping and shooting went on outside all the time. In the palace I noticed some very fine stained glass windows portraying the Emperor and Empress, but the artist had made their faces exceedingly pale—white, in fact—as if they were Europeans. I was told that it was the rule for fashionable artists to do this, as personages in high quarters always appreciated a lighter complexion than they in fact possessed. Indeed, most Abyssinians fondly believe they are white skinned.

Graziani soon changed the instructions given by Badoglio concerning foreign diplomats, and forbade us to accept social invitations from the legations of those countries which had voted in favour of sanctions against Italy. He made an exception in my case, and several times I had tea at the British and French Legations.

I always thought the decision of the League of Nations to apply sanctions to Italy foolish, but it must be admitted that both Great Britain and France applied them in a very mild, I should almost say friendly, manner. In the roadstead of Mogadishu I saw with my own eyes three large British cargo boats proudly flying the Union Jack and laden with immense quantities of material and foodstuffs for the Italian army—and British oil tankers were a common sight.

In Jibuti, capital of French Somaliland, I saw mountains of goods stacked, and these were gradually sent to the Italians by the railway, whose terminus was Addis Ababa. I was struck by the gigantic piles of wooden boxes of Italian mineral waters. They were all intended for the Italian army, where the officers and many of the men were in the habit of drinking only such waters, extremely popular in Italy. They were distributed gratis, and to a great extent prevented intestinal infections.

* * *

When Emperor Haile Selassie returned to his throne in 1943, since he was a very intelligent man he retained the whole of the Italian civil medical organization. The Emperor also showed himself magnanimous: no persecution of Italians took place then or later, and quite a number of them still live there. I am told it is not unusual to see in their houses portraits of the Em-

peror side by side with those of Victor Emmanuel II, Umberto, Garibaldi, and the Pope.

For services rendered in the Ethiopian War, General De Bono was made a Marshal, Badoglio was made Duke of Addis Ababa, Graziani became Marquis of Neghelle, and, to my surprise, His Majesty Victor Emmanuel conferred upon me the hereditary title of Count of Chisimaio, graciously selecting as motto for the coat of arms *Salus militum victoriae pignus* (Victory depends on the health of the soldiers)

* * *

The Ethiopian war evoked great medical interest all over the world, owing to the extremely small losses from disease sustained by the Italian armies, fighting in far away tropical regions Some journalists went so far as to say that the war had been won by the men behind the microscope and not the men behind the guns—a tremendous exaggeration The doctors, however, indirectly greatly helped the generals in winning it.

The state of health of the troops was excellent during the whole period of the war (October 3, 1935–May 9, 1936), and while in all previous tropical wars fought by white men the mortality from disease had been appalling, and always much higher than that due to enemy action, in the Italo-Ethiopian war the number of deaths from disease was small, and much lower than that caused by enemy weapons The following table shows at a glance the losses sustained by the Italian troops, which, including the Militia, the Police, and the many labour battalions numbered approximately half a million men

Deaths on the field or from wounds		
Officers		119
Men		980
	Total	1,099
Deaths from disease		
Officers		22
Men		577
	Total	599

According to the experiences of previous colonial wars in which white troops were chiefly employed, we should have expected over 20,000 deaths from disease.

In terminating may I be allowed to quote, slightly abbreviated, *a portion of the despatch from* Addis Ababa *sent* by an eye-witness, Mr. James L. Rohrbaugh of the United Press (*United Press Red Letter*, New York, July 11, 1936):

"*In the* Abyssinian *Army*, diseases were numerous. More than half the cases were dysentery. Scurvy destroyed the army on the southern front, smallpox decimated the army of Mulughieta on the northern front. At Dessie pneumonia was raging. The terrible disease, typhus, was passing from one camp to another, *killing the victims in a few days*. Malaria and relapsing fever were common. Women and children in thousands accompanied the *soldiers to the* front, but only a very few returned, the others being killed by disease.

"The Red Cross doctors tried in vain to help the soldiers; they were only able to carry out their work in small zones. The army was destroyed to a great extent by disease and *hunger*."

Rohrbaugh ends his article as follows:

"It is obviously no exaggeration *to* say *that* one of the prime reasons for Italian success was the continuous health of its armies, due to the efficiency of their medical services. It might also be observed that *medical science* made it possible for white people *to live in* unhealthy climates *under adverse* conditions, and to remain in better health than natives acclimatized by hundreds of years of continuous abode." *

* *Those who are interested in reading about this matter in greater detail* are referred *to* the second appendix, "Medical Aspects of the Ethiopian Campaign."

CHAPTER XI

THE SECOND WORLD WAR

June 10, 1940 . . the most tragic day of my life. England and Italy are at war I love England, but I am a son of Italy and I have never changed my nationality—one cannot deny one's mother. I obey my king and country. I support my country, right or wrong . .

[illegible] the radio suddenly [illegible] stunned, as [illegible] believe it

In the morning I had seen patients at Harley Street as usual, with one, Lord N , I had been 'talking politics', and we had both come to the firm conclusion that there could not possibly be war between our two countries In the afternoon I had paid my customary daily visit to the Italian Hospital

Among the guests at the dinner was my friend the well known writer George Bilainkin in his fascinating book *Diary of a Diplomatic Correspondent* he has described the scene in a graphic manner

I telephoned Harley Street. My secretary informed me that two bowler-hatted young men—detectives, of course—had called and asked where I was One of them added "You had better get a small suitcase ready for the doctor, as he may be away for a few days" On hearing this I decided to go to the Italian Embassy, where Ambassador Bastianini, a friend and patient of mine, had offered me hospitality in such an event I never thought the need would arise, although months before I had received from Rome provisional orders to rejoin the Italian Medical Service if war broke out.

To Italians of my generation, war between England and Italy was unthinkable I was born in Florence of Italian parents, and in my family, as in so many other Italian families, there was a deep feeling of friendship and gratitude towards Great Britain for the help given to Garibaldi and many other Italian patriots during the *Risorgimento* Cavour's life was often read in Italian schools, and our attention drawn to his

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I took a third taxi, and returned to the Embassy

On Friday, June 13, a number of official motor cars arrived after luncheon to take us to our destination From a first floor window overlooking Grosvenor Square, we could see that a large crowd had gathered One young Secretary who had been in England only a short time said with some alarm "I wonder if there will be a hostile demonstration?" I replied reassuringly "My dear young friend, you don't know what an English crowd is like on an occasion like this"

The Ambassador and his wife entered their open car with their four lovely children The crowd, mostly women, began to cheer, flowers were thrown into the car, and one old lady gave the youngest child a box of sweets In the second car were the young Secretary and myself he was astounded Having lived in England for so long I was not

In the late afternoon we boarded a special train which took us, after an all night journey, to Scotland The moment we arrived in Glasgow we ceased to be under the benevolent and gentlemanly control of the Foreign Office, and came instead under the jurisdiction of the Home Office—in other words, the police What a difference! There was no actual rudeness or harshness, but the atmosphere became noticeably frigid, and we felt a bit like criminals

We were taken on board a troopship called the *Monarch of Bermuda* She had just arrived from Norway, and there had been no time for cleaning or disinfecting Hygienic conditions were far from perfect—and there was also a shortage of water

Everybody, including the Ambassador and Ambassadress, received orders to remain in their cabins, and guards were posted in the passages These men were elderly Marines and sailors just recalled from the Reserve, all of them over forty, and most of them on the plump side At first they took their duties seriously In the evening however, we succeeded in getting two cases of beer from the bar, and distributed a good few bottles among them This had the desired effect, and they were soon laughing and joking at midnight they were all sleeping peacefully, though by no means noiselessly

On the third day we were taken out of Glasgow docks to a loch, and were then allowed to leave our cabins, but not to go ashore We remained there for a deadly monotonous period of ten days during this time (at least in theory) we were not

memorable words about England: "I have been accustomed from childhood to respect that country . . . as the one from which I have drawn most of the political conceptions that have guided me in my career. I esteem and respect England, which I regard as one of the principal forces in the world; I venerate her because I regard her as the rock on which liberty has found, and may perhaps still find, inviolable sanctuary." My maternal grandfather—a Giuliani—was for a long time a political refugee in England.

I went straight to the Italian Embassy at No. 4 Grosvenor Square, where the Bastianinis installed me in a comfortable little suite on the second floor. Bastianini told me that the authorities would recognize my semi-diplomatic status as official medical adviser to the Embassy, and would allow me to accompany him.

Within a couple of hours the Embassy was filled with Italians of all classes, from the richest to the poorest, and including children and babes in arms. The Ambassador and his wife were really good-hearted; they provided hot coffee, milk, bread and butter, and sandwiches for the crowd. Mattresses were placed on the floors of the large luxurious drawing rooms by the Ambassadress and her servants, and hundreds of people slept there that night. At three o'clock in the morning I inspected the 'dormitories', where the throng lay sleeping peacefully on the floor. On the walls, dimly lit, hung the masterpieces of Italian art which had been transferred from famous Italian picture galleries to the London Embassy in Grandi's time.

The following morning I left the house by a back door and took a taxi to the Italian Hospital, where I had worked for so many years. I had a long talk with the Chairman, Sir Ronald Graham, who had been Ambassador in Rome for twelve years. He generously promised to do all he could for the hospital in my absence. I also had a talk with the highly competent young secretary, John Conn.

From the hospital I took a taxi to [illegible] Harley Street; my plate had already been removed from the door. I rang the bell, and the housekeeper appeared. I might have been a phantom from the way she stared at me. My faithful, efficient secretary was out, but returned within a few minutes. She told me that some of my old patients had been there that day in the hope of seeing me. One poor old lady was in tears.

I took a third taxi, and returned to the Embassy

On Friday, June 13, a number of official motor cars arrived after luncheon to take us to our destination From a first floor window overlooking Grosvenor Square, we could see that a large crowd had gathered One young Secretary who had been in England only a short time said with some alarm "I wonder if there will be a hostile demonstration?" I replied reassuringly ' My dear young friend, you don't know what an English crowd is like on an occasion like this "

The Ambassador and his wife entered their open car with their four lovely children. The crowd, mostly women, began to cheer, flowers were thrown into the car, and one old lady gave the youngest child a box of sweets In the second car were the young Secretary and myself he was astounded Having lived in England for so long, I was not.

In the late afternoon we boarded a special train which took us, after an all night journey, to Scotland The moment we arrived in Glasgow we ceased to be under the benevolent and gentlemanly control of the Foreign Office, and came instead under the jurisdiction of the Home Office—in other words, the police What a difference! There was no actual rudeness or harshness, but the atmosphere became noticeably frigid, and we felt a bit like criminals

We were taken on board a troopship called the *Monarch of Bermuda* She had just arrived from Norway, and there had been no time for cleaning or disinfecting Hygienic conditions were far from perfect—and there was also a shortage of water

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allowed to receive newspapers or letters, or listen to the wireless If we had more than fifty pounds we had to hand the money in, and were given a receipt, this, like all such receipts in the warring countries, did not prove to be worth much

On June 24 1940, the ship at last sailed for her destination, Lisbon Although she was crowded, there was no shortage of food, but naturally one could not expect high class cooking The ship was far too small for so many people her normal accommodation was for two hundred passengers, and there were over six hundred of us on board These natural inconveniences apart, the officers and crew were on the whole civil to us, and the guards, who had pretended to look so ferocious at the beginning, lost all trace of unpleasantness and were very friendly

We arrived in Lisbon on June 28 I was given rooms at the Avenida Palace Hotel, but usually had my meals with the Bastianinis at the Italian Legation, where the Minister was then Baron Bona Scotti He and his wife, a White Russian, were most hospitable

I remember that at the time a Brazilian training ship was anchored in the Tagus One day I saw a column of its cadets marching along the road from the harbour to Belem They were preceded by a brass band, and I was astonished at the many variations in the physical appearance of those who made up the band some were tall, some short, some thin, some fat, some white and fair, some black as coal, some cafe au lait A picturesque mosaic—though possibly not a very martial looking company—of all types and races In the musical section of the Brazilian Navy there was certainly complete integration

On the morning of July 1 the famous Italian transatlantic liner *Conte Rosso* arrived from Naples On board were the British Ambassador, Sir Percy Loraine and members of his staff, as well as a number of British residents in Italy They landed, and we embarked The two parties saw one another at a distance, but did not meet or speak

What a contrast between the luxurious *Conte Rosso* and the *Monarch of Bermuda*! We heard later that the British party soon lamented the changeover from the opulent Italian liner to the comfortless British troopship On the *Conte Rosso* the stark reality of war faded for a few days, food was plentiful and de

licious, and the young people danced every night. We might have been on a peaceful pleasure cruise

We arrived at Messina on July 6, and left the same day for Rome. Immediately we arrived there, I called on the Chief of the General Staff, Marshal Badoglio, and the Minister for the Navy, Admiral Cavagnari. The former was remarkably optimistic about the war He told me that I should in all probability be sent to Africa, and continued "As soon as you get the order, go without delay, as I feel certain the war will be over in six weeks" I then drove to the Naval Ministry and saw the Minister, who was an old friend I feel sure that, in common with most of his naval colleagues, and, in truth, with the vast majority of Italians, he had British sympathies, but in times of war personal feelings, sympathies, and friendships count for very little they have to give way to duty Cavagnari was a fine man, strict and just, and a great believer in hard work and efficiency To him might be applied the saying "He likes the doers and not the talkers, and is feared by the slackers" During [illegible] into a [illegible] hurried into the office he was on a flying visit from Africa. Catching sight of me, he turned to Cavagnari, exclaiming "Just the very man I want. He was most useful to me in Somalia in 'thirty-five, he will be equally useful in Libya" Graziani added jokingly "Don't you dare employ him in the Navy!" Cavagnari laughed and answered "You can have him by all means, but he will have to wear naval uniform"

During those few days in Rome I went once to lunch at my club, the Caccia. Ciano entered, followed by his usual retinue of beauties He stopped at my table, gesticulating, laughing, and brandishing an English paper secured from I don't know where He pointed to a paragraph stating that all Italian enemy aliens had been deprived of their British decorations "So,' said Ciano, "that means the Duce is no longer a G B E, and you are no longer a K.C M G The matter does not affect me, as they never gave me anything" I did not share Ciano's amusement. The news grieved me deeply, though I quite understood that war is war

About this time sera and vaccines were in short supply in Italy, and it was decided that, before leaving for Africa, I should

go to Paris with my old assistant, Professor Mariani, to obtain a supply from the Pasteur Institute So in August 1940 we started off—though "going to Paris" was easier said than done At Turin we were stopped by our Allies, the Germans, and though we were both in uniform—I as a Surgeon General, Mariani as a Surgeon Major—it was more than ten days before permission was given us to proceed to the French capital

Eventually the permits came through, and we continued the journey The Gare de Lyon was completely deserted, apart from a couple of porters who carried our luggage outside the station and dumped it on the pavement Not a taxi was to be seen, nor a horse drawn carriage of any description We saw two or three heavily laden handcarts being apathetically pulled by men, and vigorously pushed from behind by women it reminded me of my days in Ceylon Just as we were beginning to abandon hope of any kind of conveyance, our luck turned and a car from the Italian Embassy, with a young Secretary at the wheel, drove up

He took us to a hotel—I will not mention its name—cold and exorbitantly expensive, and the food, what there was of it, uneatable The menu consisted of chunks of boiled cabbage and beetroot (which I cannot bear even in normal times) served in various ways, cooked and uncooked The bread, black and hard as a bullet, contained a plentiful amount of straw

We stood that miserable, gloom producing regimen for two days, and then, in desperation, approached the porter Depositing a biggish tip in his ever ready hand, we begged him to give us the address of a restaurant where we could get some decent food After looking furtively from right to left for possible eavesdroppers, he whispered the name of a well known restaurant, not a stone's throw from the Elysée Palace, which was supposedly closed for the duration 'You will find the place with the shutters up and a notice outside saying *Fermé*," he murmured "Take no notice of it Ring the bell at the side door"

That night we made our way to the famous restaurant to find everything as our conspiratorial porter had described shuttered windows, a deserted air and a large notice proclaiming '*Fermé*' *We discovered the side door* and rang the bell It was opened cautiously, and we found ourselves in a small dark hall A moment later another door opened, *revealing to our*

astonished gaze a brilliantly illuminated room, dotted with small tables Snow white linen and gleaming glasses covered the tables, elegant waiters in tails and white waistcoats hovered round attentively, and a delicious smell of *cordon bleu* cooking pervaded the air After two days of dishwater, cabbage, and black bread, our contentment can be imagined When that unforgettable meal was over, we sat back happily over our coffee (real coffee, even, was provided), and surveyed the scene we saw with interest that almost ninety per cent of the tables were occupied by German officers in uniform.

The following day we went to the Pasteur Institute, and found everyone kind and helpful. There, as in many other places, I had the impression of a rather pro-Pétain atmosphere one frequently heard 'Le Maréchal' mentioned in affectionate tones

* * *

I left for Africa at the end of August 1940, embarking on a hospital ship which took me to Tripoli From there I proceeded by car to Cirene, five hundred miles eastward, where Marshal Graziani had his headquarters As always, he received me most cordially he told me that I should in all probability be staying at Derna, but that in the meanwhile I should remain at H Q

The week in Cirene passed quite comfortably A good hotel on the hill had been requisitioned for the High Command I dined regularly with the Chief of Staff, and lunched daily with Graziani in his small house about a hundred yards down the hill. The Chief of Staff was, without doubt, a good man at his job, but he had a shocking temper and was perpetually [illegible]

[illegible]

[illegible] Governor's summer house as my residence It was a pretty, tiny house, with three rooms, a bathroom, and a terrace like roof It was situated only a few yards from the beach, and about sixty yards from the naval radio station This proximity to the radio station was a drawback from the point of view of comfort, as the station was bombed every night with monotonous regularity, and a good few of the bombs

fell in our compound. On the other hand, it was an advantage to me from a scientific point of view, as it enabled me to start the investigation I had had in mind for years into the mental and bodily reactions of individuals exposed to bombardment.

Being a general, I felt bound to invite other officers, both medical and non-medical, to meals at my little house. It was noticeable that the invitations to luncheon were always accepted with alacrity, but *the invitations to supper never. At dinner* time the medical officers invariably found themselves in a great hurry to get back to their patients at the base hospitals just outside Derna, *and the other officers discovered that they were* urgently needed at their commands—also outside Derna. One of them, however, candidly informed me that in his opinion my *little villa held* great attractions in the daytime, but *was not* suitable for hospitality and entertainment at night, as the noises from outside interfered too much with conversation and conviviality.

In Derna, a portion of the big colonial civil hospital had been transformed into a military section for casualties occurring in the city, under the directorship of Captain Babini, an excellent surgeon and a good administrator. During the nightly bombardments I used to go to the hospital to see that the patients were comfortable, and that those for whom there was no room in the shelter were properly attended to in the wards; and that at least one of the doctors and a few medical orderlies remained with them. I always found Captain Babini in the wards with his patients. I liked him very much, and later he became my medical secretary and accompanied me everywhere. (In the Italian Army a surgeon-general has a medical secretary who is also a sort of A.D.C.) I recommended him for a decoration, but by some bureaucratic muddle the recipient was another fellow, temporarily attached to the hospital and well-known as 'the rabbit'; he would run at the double to the shelter the moment the sirens started sounding. Notwithstanding all my efforts, I was never able to put the matter right.

The nurses of the Derna Hospital were nuns—very efficient and brave women—and their Mother Superior was a character: extremely courageous, working day and night, she would, when annoyed, occasionally use language that one would not normally expect from the lips of a woman of God. Later she received the Bronze Medal for Valour, which *she richly de-*



Photo Plan[illegible]

The last day at the Quirinal. The populace had invaded the palace beggin
the King to stay. His Majesty bids farewell to the children.



R H Princess Maria Pia at the age of seven examining a blood fil
laria parasites at the University Hospital for Tropical Diseases R

served in her case, fortunately, no bureaucratic muddle took place.

From Derna I frequently visited Tobruk, that horrible, malodorous place, half destroyed by bombardments I remember once being asked by the Admiral to dine with him at the 'Naval Command Building', the dining-room, at the top of the build- [illegible] off by a [illegible] Tobruk. Exposed to never-ending bombardments, and enduring untold privations, they often developed a peculiar terrorized expression which came to be known as 'Tobruk face' Their life was appal- [illegible] he [illegible] was; a week later my pretty little residence in Derna was pulverized by a bomb

On one of my Tobruk visits, news was received while I was at the Naval Command that a mixed battery—that is to say, a battery manned by both sailors and army artillery soldiers—at the perimeter of the defence, about twenty miles distant, had been badly bombarded from the air and sea, and medical assistance was urgently required It was late in the evening, and no doctors were available at the time, so I went myself in a car driven by an army ambulance driver who had volunteered and knew the road. We arrived at the battery just as another bombardment was beginning.

In many war books [illegible] passages derogatory [illegible] author of a well-kno[illegible] Young, wrote, for instance, that in this last war they had "almost taken the place in military legend of our oldest allies in the First War"

I wish the authors of those books had been there that night. Although one of the guns had exploded, and the ground was littered with dead and wounded, the surviving soldiers and sailors went on firing, shouting "*Viva l'Italia! Viva il Re!*" Helped by my medical-orderly chauffeur, I tended the wounded as best I could I was proud of those boys I took the pulse of three or four of them for the investigation I have already mentioned Naturally it was increased in frequency, but it was the

strong, full pulse of the fighter, not the weak, empty pulse of the coward

* * *

December 9, 1940 . . . I was at Cirene, and had been asked by Marshal Graziani to luncheon at one o'clock, punctually I arrived at the house at 12 45 Another officer, a lieutenant-colonel, had also been invited, and the two of us sat waiting for our host in the little dining-room

The scene remains indelibly imprinted on my memory. the small table laid for three, with its snow-white cloth, the three glasses already filled with wine, as is the custom with Arab servants, the two tall Libyan domestics, in flowing white robes, flitting silently in and out of the room with an enquiring mien, the colonel and myself seated on a small sofa, waiting for the Marshal We could hear him busy on the telephone outside, but he was too far away for us to catch his words

Graziani remained at the telephone for over two hours, and when at last he entered the room his face was that of a man struck by terrible calamity He told us that in the early morning the British had launched an offensive, and that two entire Italian divisions had crumbled under their advancing tanks

"We have no real tanks," Graziani added dejectedly, "only tin-covered trucks"

We had a hurried, miserable lunch, and then the Marshal left at once for the front, where Gariboldi was in command I saw him three days later at Tobruk he looked absolutely done in. He stopped for a moment at a small medical post and asked for a glass of water, which I found for him he refused brandy

The following day the Marshal returned to Cirene He ordered a general retreat, and gave me written orders to proceed to Tripoli to supervise the medical organization for the masses of soldiers about to retreat from Cyrenaica to Tripolitania. Then Graziani, as Commander-in Chief of all the forces in Libya, and representing the King pinned on my breast the Silver Medal for Bravery on the Field—the honour, with its citation, which I cherish most

I proceeded to Tripoli, and found that both military and civil hospital arrangements were in satisfactory shape, so most of my time was spent doing the clinical work that I have always loved Tripoli was bombarded nightly and I was able to

amplify my researches on the effects of bombardment, in this I was much helped by Surgeon Lieutenant Colonel Felice Pullè and Surgeon Captain Giuseppe Scotti

In February, 1941, we all expected Tripoli to be occupied any day by the British they would not have encountered any opposition The few battalions of regulars left after the retreat were scattered about eighty miles to the west, holding the so-called front, they had no tanks and no artillery While Tripoli suffered heavy nightly bombardment, there were only desultory attacks or even complete calm at the 'front Not infrequently one of us would say "Well, I think I could do with some uninterrupted sleep tonight, I'm off to the 'front' "

These few battalions, without a single tank, could have been overwhelmed by the British at any moment, and General Miele, Gariboldi's Chief of Staff, was absolutely certain that we should all be made prisoners within a few days He was a brave and capable officer but what could he do without any troops, or guns, or tanks?

The British did not appear Instead, at the end of February, a few German officers arrived by aeroplane one of them was a Viennese lieutenant-colonel, a charming fellow He came to see me about medical arrangements for the German Army, and asked me to relinquish part of the magnificent civil general hospital of Tripoli to the German medical service I had to agree

I was in Tripoli at the end of March, 1941, when Rommel arrived with the bulk of his expeditionary force Most of his war material was disembarked in one night from the transports in a blaze of floodlights We thought it utter madness, we expected the sudden appearance of enemy 'planes and ships But the Germans were in luck all went well By about eleven o'clock the following day the whole panzer division had been landed It was an impressive exhibition of German thoroughness and organization As they were lifted from the transport boats by huge cranes one could see field kitchens actually smoking while they were swung ashore the cooking [illegible]

[illegible]

[illegible] General Gariboldi, a typical general of the old school rather cold and bureaucratic, and with little personality, although quite a capable officer He gave a

luncheon at the Governor's palace in honour of Rommel to which I was invited

Rommel was a youngish looking man of between forty five and fifty, fair haired, blue eyed, with a trace of blond moustache on the upper lip rather short and stocky, but looking every inch a soldier His expression was keen, intelligent and not unfriendly—not a bit the expression of the typical Prussian general He was smartly dressed in jacket and breeches

The luncheon was a success, and Gariboldi and Rommel exchanged cordial toasts Immediately after lunch, Rommel went out into the large square in Tripoli, where the motorized troops and tanks were lined up He gave a brief rousing address and then the march to the front started I and several other Italian officers who knew Tripoli well took a short cut to the southern extremity of the city—the road leading to the airport—and there, after a little while, we saw the approach of the German armoured column, followed by the Italians One thing that struck us most was the contrast in appearance between the gigantic German tanks and the puny Italian ones Small wonder that they were referred to by our Teutonic allies as 'sardine tins'

So Rommel s campaign began, the lightning campaign that was to take him, with his famous panzer division, and two recently arrived, most excellent Italian divisions from victory to victory, until, by the middle of April 1941, the whole of Tripolitania was reconquered, and all of Cyrenaica with the exception of Tobruk

* * *

A few months later, in September 1941 General Gariboldi who had succeeded Graziani, was in his turn succeeded by Generals Bastico and Gambara both of Spanish Civil War fame Some months before, in December 1940, Badoglio had resigned and was succeeded by Cavallero whom I had met some years previously at the Colonial Office He was a very clever man and it is said very ambitious He had left the army a few years before to become head of some huge Italian steel concern, but after Badoglio s resignation he was recalled and made Chief of the General Staff In my flying visits to Rome from Africa I saw him often tending him for some minor com

plaint. He was very kind to me, and always willing to do a favour. I recall that in October, 1942, a royal princess expressed concern at rumours that harsh treatment was being meted out to captured English generals at '*Campo* 12', in the neighbourhood of Florence. I was then on short leave in Rome from Libya to attend Mussolini, who was ill. To allay the princess's fears, Cavallero sent me with another officer to investigate. he was aware of my strong convictions regarding the fair treatment of prisoners, even if the enemy fail in their duty in this respect, my belief being that two wrongs do not make a right—and, moreover, one must always keep in mind the exaggerations and lies of propaganda.

We went to Florence, to *Campo Prigionieri* 12, to find that it was not a *campo* at all, but a beautiful castle on the slope of a hill—*Castello di Vincigliata*. It was interesting to meet there such famous soldiers as Neame, O'Connor, and de Wiart, the last-named most agile, alert, and nimble (and loquacious), notwithstanding the scars of many old wounds. Generals Neame and O'Connor had been taken prisoner in Africa in April 1941, with their personal staff, while motoring back from the front, they were in what they thought a perfectly safe region when, in the blackness of the night, they drove straight into a German patrol. Adrian Carton de Wiart was captured in the same month when the 'plane bringing him from England via Malta to Cairo came down in the sea near Derna.

De Wiart was of Belgian origin, and had had an almost incredible life. He started soldiering for Britain before he became a British subject, during the Boer War. In the First World War he lost an arm and an eye, and won the Victoria Cross. He was [illegible] ...ght with the Poles. Then he was sent to Narvik in command of a British expeditionary force, but his generalship accord... [illegible] ...ttle.

The inmates of the camp told me that on the whole they were satisfied with the treatment they were receiving, and I reported to that effect in higher quarters. The officers in command of the Italian guard were most of them easy-going, and probably

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[illegible] in the 1920s. Then he was sent to Narvik in command of a British expeditionary force, but his generalship, according to his critics, never equalled his personal bravery or his prowess in single combat, and the expedition was a miserable failure. Finally he was sent to the Middle East, to be captured before he got there.

The inmates of the camp told me that on the whole they were satisfied with the treatment they were receiving, and I reported to that effect in higher quarters. The officers in command of the Italian guard were most of them easy-going, and probably

in their heart of hearts had British sympathies, like practically everyone else in Italy The surveillance was certainly not very strict anyway, a few months later, in March 1943, all the prisoners I have mentioned succeeded in escaping

It may interest the reader to know that *Castello di Vincigliata* was built and owned by an Englishman called Temple Leader, a Liberal M P Queen Victoria, during her holiday in Florence in 1899, once lunched at the castle Her Majesty was staying at Villa Fabbricotti

* * *

On November 15, 1941, a daring attack was carried out by a small commando force on Beda Vittoria, with the object of capturing Rommel who, as the British believed, was sleeping there that night Under cover of darkness, the commandos first cut down all the telegraph wires and poles in the vicinity of the village A few of them then made their way to a certain house in which they had been informed that Rommel would be sleeping Rommel, however, was not there he was on a short visit to Rome, where he spent his birthday, and as a matter of fact his headquarters never had been at Beda Vittoria—they were in the desert west of Derna

That night I was sleeping at Cirene The alarm was raised, and the rumour spread like wildfire that a large body of British troops had occupied Beda Vittoria At headquarters there were only a few elderly soldiers, mostly batmen, cooks, and clerks They were hurriedly assembled and dispatched in trucks to the village, followed by two ambulances under the charge of a surgeon captain, whose car I shared On the way we saw the destroyed telegraph poles and wires strewn over the ground, but Italian engineers were already repairing the damage When we arrived, we found that the whole of the small commando force had been captured by the *carabinieri*

In December 1941, Rommel unexpectedly decided to retreat the Italian Command was opposed to it, especially Gambara Cavallero and Kesselring flew from Rome to Cirene, accompanied by Colonel Giuseppe Montezzemolo, and on December 14 a meeting was held in a small village near Cirene, in which the Commander of Aviation, General Marchese, also took part I was present, a highly interested spectator

Gambara was dead against the withdrawal, he said that the information received by the Germans that large French forces were arriving from the Sahara Desert was unfounded, and he threatened to resign his command It has remained impressed upon my memory how Cavallero gently took him by the arm and entreated him to agree to Rommel's suggestion, and how finally, but very reluctantly, Gambara agreed

The retreat was never a rout, and very little material was lost. There was, of course, tremendous congestion on the Balbia road—three or four rows of vehicles of every description, including tanks, all moving abreast in the same westward direction Every now and again the huge stream would suddenly come to a halt, and we would remain stationary for an hour or more It was fortunate for us there were no air raids During one of the halts I remember noticing a small German staff car, a little to the rear of the one I shared with another Italian officer and a German liaison officer In the car was a blond, serious looking, very young German officer, no older than nineteen or twenty Suddenly he stood up, began screaming and gesticulating, and finally burst into tears His nervous system had been strained to the limit at the Battle of Sidi Rezeira, and had finally snapped The German liaison officer—more accurately an Austrian lieutenant-colonel—left the car and went over to him He talked to him in a fatherly way about endangering the reputation of the German Officer Corps, and the boy became calm

The retreat of the Italo-German Army proceeded in an orderly manner Rommel, by January 11, 1942, had stopped at Agedla in a naturally strong defensive position Bastico and Gambara continued on to Tripoli, I was attached to their staff Gambara soon relinquished his position as Chief of Staff, and it was sad to see the 'Italian Rommel' walking the streets of Tripoli as an unemployed general, however, he was soon to receive a command in Italy

During this period Tripoli was bombarded every night, and so I had plenty of opportunity to continue and extend my researches on the effects of bombardment on human beings

On January 21, 1942, Rommel suddenly advanced and over ran Cyrenaica once more, on March 25 the Battle of Gazala took place, and ended in victory for the German and Italian armies

In June 1942, after having been stubbornly held by a gallant South African division, Tobruk surrendered, and an enormous amount of material of all kinds fell into the hands of the attackers I went to Tobruk to investigate medical conditions, and was most struck by these countless mountainous heaps—there were literally miles of them I noticed one huge heap con sisting of hundreds of cases of tea with the inscription 'Pekoe, Ceylon' With the permission of the German N C O guarding the stuff—he was not interested in tea, he said—I took one case back to Derna and made a present of it to the Mother Superior of the Hospital She was delighted She declared that she could, with that case of tea, run the hospital for a whole month I asked in what way She replied "Well, the Arabs are extremely fond of tea, and for a teaspoonful they will give me two eggs, for a tablespoonful, a chicken, and for a pound of tea they will give me a goat Thus I can feed my hospital for a month"

A couple of weeks after the capture of Tobruk it was decided by the Italian Command to establish a field hospital in the neighbourhood of Forte Capuzzo The surrounding ground was found to be heavily mined, and a large mine detecting and clearing squad was brought in They used a long handled mine detecting instrument which, on superficial observation, looked very much like a vacuum cleaner Among them I noticed a very intelligent looking boy of about twenty—a native of Abruzzi, he told me—rather small, but strong and healthy He seemed to enjoy his job greatly, working with gusto and singing merrily, without appearing in the least afraid His cool courage pleased me, also the quick way he did his work he detected and destroyed at least three mines for every one found by his com panions I could not help praising him aloud, and adding, "You should be made a corporal"

He replied, "My captain proposed me for promotion some weeks ago, but I can t be a corporal because'—grinning broadly, and, I thought, with a touch of pride—"I am *analfa beta*, I cannot read or write But,' he continued pointing to his comrades in a sweeping gesture, "I can fish out mines better than all these *letterati professori* put together"

In the early summer of 1942 Mussolini came to Africa, and lived for a month in a small house in Berta, a village on a hill not far from Derna It was one of the villages built a few years

previously by the Italian authorities, when a scheme was conceived by Marshal Balbo for the colonization of Libya

Thousands of rural families were transferred from Italy to Libya, and each was given a small farm which, after twenty years, was to become their own property Every fifty miles a village was built, well planned, clean, properly organized Also in residence in the village were a parson, a doctor, a chemist, and an administrative officer, in addition to a few shopkeepers and small tradesmen. Each village received a name commemorating some patriotic or Fascist event one of them was given the name of Berta to honour the memory of a young Florentine patriot who, in the early 'twenties, gave his life for his ideals

Mussolini, while in Berta, had a mild relapse of his old duodenal trouble, and had to be placed on a milk diet. The Mother Superior of the Derna Hospital was most helpful every morning she managed to get two bottles of fresh milk from the Arabs which were brought by a messenger on a motor-cycle to the Duce's house He soon improved, but some slight symptoms of the lower bowel appeared, to which he refused to attach any importance They were in reality symptoms of an amoebic infection, probably contracted locally, an infection which several other prominent officials and soldiers had contracted, including General Barbasetti who, like Mussolini, refused to remain in bed. The amoebiasis was confirmed later in Rome by laboratory microscopical examinations Mussolini was also afflicted with intestinal ascariasis (round worm), and once in Rome he passed a huge *Ascaris lumbricoides* Neither Urso, Amalfitano nor I had ever seen one of such proportions a real hypertrophic Fascist Ascaris, remarked one of my assistants

In Libya Mussolini lived a very secluded life The chief member of his entourage was the secretary of the Fascist Party, Vidussoni, quite a nice lad of about twenty five, who, like so many others considered himself something of a strategist and declared the High Command to be too far from the front. Mussolini apparently was of the same opinion, because shortly after it was transferred to a place much further east Although, as I have said Mussolini led a very quiet life, he went several times to the front and once or twice to Tobruk He received an enthusiastic welcome from the troops everywhere I have heard the rumour that a tall white charger with flowing mane had

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On the whole, however, I must say that the war in North Africa was carried out in a gentlemanly manner (if one can use such a word for war), and this was chiefly due to the fact that there were no S.S units in either Libya or Cyrenaica The regular German Army loathed them

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In 1942, the health of the Italian Army in Libya continued to be satisfactory, but there was much sickness among the German troops In the summer and autumn of that year epidemic jaundice was rampant among them nearly a third of their army was down with it. At first the patients were sent to Germany, but later the German Command decided to keep them in Africa, and German hospitals became overcrowded Epidemic jaundice is a disease which, although not as a rule endangering life, nevertheless weakens one incredibly, and makes one feel miserable and depressed soldiers who have had it seldom, if ever, regain their old energy and fighting spirit In September 1943 Rommel himself contracted the disease, and as there were some serious complications he was flown to Germany There, on October 23, it is said that Hitler telephoned him at the hospital where he was recovering, with the news that things were going badly in Africa, and asking him to return immediately He arrived in Africa on October 25, when the great Battle of Alamein was in its third day he was unable to retrieve the position, and on November 4 gave the order for a general retreat.

On September 27, 1942, I had been appointed Chief Surgeon General for all the theatres of war, with residence at the Supreme Command headquarters in Rome, but was asked to remain in Libya for yet a while I left Africa a few months later on a hospital ship, the *Virgilio*, which sailed from Tripoli

been specially imported from Italy in preparation for his triumphal entry into Cairo personally I never saw the steed—and I don't think it existed At any rate, the occasion for Mussolini to ride it never materialized

From Derna and Cirene I used to inspect the hospitals at Tobruk, Solum, Sidi Barani, and Mersa Matru It was from Mersa Matru that, during the last few months of the war, hospital ships carried the wounded and sick I am glad to relate that on these ships, all of them Italian, *the rule of embarkation was enemy wounded first, German wounded next, Italian wounded last*

One of these ships, the *Arno*, on the way to Mersa Matru from Italy, was sunk in August, at night, not far from Tobruk The Red Cross nurses behaved splendidly, they were in the boats in a rough sea for hours, and were finally picked up by a destroyer which took them to Tobruk, whence they were sent by ambulance and motor-car to Derna They were under almost continuous aerial attack in the destroyer, in Tobruk, and on the way to Derna One could not but admire the courage of those young women Among them was Franca Antinori a member of the famous old Florentine family I consider it a privilege to have known her and her sister Princess Cora Caetani, both endowed with intelligence, wit, beauty and courage, and deep kindliness for the poor and the sick

On the night of September 19 1942, a violent raid took place on Tobruk, carried out by commandos under cover of sea and aerial bombardment At the time all German troops had left the fortress and only Italian naval ratings and a few Italian troops remained to hold the place under the command of Admiral Lombardi and General Giannantoni The attack was repulsed with heavy losses At the entrance to the harbour a small English destroyer was sunk and the corpses of many of the crew were washed ashore in the morning—a macabre sight

It was during this action that two commando officers were captured, and on one of them was found the famous order to attack a certain shelter and take no prisoners The wording of the order was very crude '10 Ptn will detail one section to attack the shelter, all occupants will be killed" I have a photographic copy of the original captured English order given to me by the head of the Intelligence Section of the Italian Com-

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on January 19, 1943 In the harbour lay another hospital ship, the *Tevere*, half sunk. Our ship and one other were the only two left of the splendid fleet of eight hospital ships which Italy possessed at the beginning of the war. six had been sunk.

I went to Rome and took up my new duties at the end of January. As my assistant I had an able army doctor, Major Scaduto In the months that followed, I went for tours of inspection by air, by sea, and by land In June and July I was in Sicily, where my old friend General Guzzoni was in command, he was a brave and able soldier, but what could he do with his scanty troops and lack of guns and equipment?

* * *

When I arrived in Libya in August 1940, I found the medical conditions quite different from those in Ethiopia a few years previously Large bodies of troops had been stationed there for a long time, and there were a sufficient number of properly equipped and staffed military hospitals The Libyan branch of the colonial medical service was good, and there existed numerous hospitals and outdoor dispensaries for the indigenous population Some of the hospitals in the large towns were excellent the General Hospital in Tripoli might have been envied by many European cities

Notwithstanding all this, the medical organization could not be compared in its completeness and abundance with that of the Ethiopian War—and this is easily understandable, as in addition to the Libyan front there were the East African and several European theatres to be attended to and supplied

It may sound incongruous and almost ludicrous to relate that one of the items I missed most was the perfectly organized dental service which we had during the Abyssinian campaign I especially deplored the absence of the twelve mobile dental units with complete operating cabins and laboratories which had done such excellent work in Somalia, Eritrea, and Abyssinia in 1935–36 At that time I was criticized and even ridiculed for paying so much attention to dental care, but I firmly believe I was right in my experience the greatest hero ceases to be one when afflicted with bad toothache

The medical service of the Africa Corps was excellent, and

its members worthily upheld the high tradition of German medicine Their field hospitals also were good, but much below the Italian standard Not rarely—although this sounds unbelievable—we had to lend them drugs and sanitary material

Several British officers, wounded or sick, have remarked on the superiority of the Italian hospitals in regard to comfort and organization Brigadier James Hargest, in his book *Farewell Campo 12*, recounts on page 27 the impression he had of a certain German hospital not far from the place where he was made prisoner "The conditions were appalling sick and wounded British and Germans were lying about on straw on the floor of the rooms used as wards The straw was dirty and the smell revolting" The German medical man in charge was a good and humane man, but he was hopelessly handicapped by the lack of equipment and shortage of staff Some two miles away there was an Italian tent hospital, and Brigadier Hargest puts on record his pleasant surprise "The tents were large and airy and reasonably clean There were linen sheets on the beds and matting on the floor, and we could see that the doctors and orderlies were most attentive to the comfort of the men, all of whom spoke gratefully of the care they were receiving"

The German medical officers were working at the beginning of the campaign under a serious handicap very few of them had practical experience of tropical and subtropical diseases, while the great majority of Italian medical officers had had plenty of it in Somalia, Eritrea, and Abyssinia Von Esebek has written 'Our doctors did not know from experience about keeping troops fit in a tropical climate"

The Germans landed in Tripoli (March 1941) under the impression that in both Tripolitania and Cyrenaica malaria was rampant and dysentery rare, they had read this in their ponderous treatises on the epidemiology and geographical distribution of disease compiled by authorities who had never been near those countries The truth was the other way round except for a minute focus about thirty miles south of Tripoli, there was no malaria in Libya, but cases of diarrhoea and dysentery were plentiful, the latter being chiefly bacterial

Dysentery and digestive disturbances in general were far more frequent among the Germans than among the Italian

troops—and the trouble began a few days after their landing To a great extent this was due to their diet, it was a common sight to see German soldiers eating gigantic sandwiches filled with chunks of lard and sausage—certainly not the most appropriate diet for a tropical climate At the time, General Gariboldi had just succeeded Marshal Graziani as Commander-in-Chief of the Italian troops and Governor of Libya, and I received a letter from him informing me that Rommel had officially requested that I should give some advice as to the best way of preventing these abdominal troubles among his troops I wrote in my reply "In tropical and subtropical countries the teaching of the Koran should be strictly followed no pork"

The Germans arrived in Libya well prepared to fight malaria—so well prepared that a certain unit landed in Tripoli with small mosquito-nets dangling from their helmets and covering their faces The German soldier is the most disciplined in the world, but even he could not stand the discomfort of the helmet-*cum* mosquito net in the heat of Tripoli, and within three days they had all discarded them The Italian or French soldier would have done it within twenty-four hours, the British soldier within, perhaps, forty eight

At first both officers and men were also obliged to take a tablet of Atebrin a day, to prevent the malarial infection which did not exist Some of them became very yellow, developing 'Atebrin pseudo jaundice', easily differentiated from true jaundice as the eyes remain white The Germans soon discontinued malaria prophylaxis, the Italians never resorted to it except in the Fezzan, which is not Libya

In Libya we had a most peculiar experience which neither my German colleagues nor I were able to explain, although numerous theories were put forward In 1941, and much more so in 1942, diphtheria broke out in several German units, and two hospitals were set apart solely for the admission and treatment of diphtheria cases, their complications, and *sequelae* The interesting and most peculiar fact was that among the Italian troops, who outnumbered the Germans by four to one, not a single case of diphtheria was recorded, even among those units which were intermingled with German units The suggestion was made that the cases of throat diphtheria originated from cases of *veld sore (diphtheric desert sore)*, and this is quite

possible, but how it was that only German troops were affected we were never able to discover, as veld sore was as common among the Italians as among the Germans

* * *

In October 1940, I had a message from the commanding officer of a large base hospital near Derna to the effect that during the preceding three or four weeks they had been admitting a number of cases of 'rheumatism', most of them coming from the labour battalions stationed near the town. I thought I had better go and see them

They had all been placed in the same ward, so it was easy to have a general look at them *en bloc* and then examine them individually They had a peculiar, slightly puffy appearance, and looked anaemic I examined half a-dozen and found that in each one the legs were slightly swollen, and on the skin could be seen a few small red spots which did not disappear on pressure with the finger In a few cases the gums were swollen and bleeding

The so-called 'rheumatism' was scurvy, a disease which neither the hospital physician nor the regimental doctors had ever seen. I suggested to the director of the hospital the immediate administration of lemon juice But lemons were scarce and, moreover, he thought it would be more scientific to give injections of pure ascorbic acid (vitamin C), of which there was a plentiful supply, but the result were very poor On the other hand, those few patients who had been given lemon juice quickly recovered

During the era of sailing ships, when sailors were away from home for months and even years, and never had any fresh fruit, scurvy was rampant in the Royal Navy and Mercantile Marine As soon as it was discovered empirically (a word employed by us doctors with some disdain) that lemon juice prevented scurvy, the Admiralty added lemons to the rations of the sailor afloat, and it was from the lemon in his ration that the British sailor acquired the nickname 'Limey', bestowed upon him by the Americans. (Limehouse *takes its name from the wharf* where the lemons were stored.) In those days the lemons came from Sicily and the Mediterranean countries, but about the middle of the last century the West Indies petitioned the

Admiralty to buy the citrus fruits from them, a British colony, rather than from Sicily, a foreign country The Admiralty acquiesced After a time scurvy again became common in the Navy, and lemons and citrus fruits in general fell into disrepute as antiscorbutics, and great medical authorities prescribed mercury or quinine instead I remember that when I was a medical student in Florence the Professor of Materia Medica, in discussing the treatment of scurvy and advocating salicylates, used to mention that in the old days there was a 'superstition' among sailors that lemons could cure the disease

However, soon after the First World War, workers in the Lister Institute in London experimentally proved beyond doubt that lemons were a cure for scurvy—but they must be Sicilian or Mediterranean lemons for some unknown reason those of the West Indies were practically inert

Returning to the outbreak of scurvy near Derna, I advised the distribution of lemons to all troops, with the slogan "A lemon a day keeps the scurvy away" Actually a lemon a day was officially in the ration of the Italian soldier in Libya, but it had been discontinued owing to cargoes from Sicily being torpedoed and sunk on the way to Tripoli, Benghazi, and Derna Libyan lemons were fairly good, but not sufficient in quantity The space in the few cargo boats remaining afloat was needed for war material, and I found great difficulty in persuading the High Command that lemons were indirectly war material Fortunately I was able to obtain the support of H R H the Crown Princess, who was then on a visit to Sicily Cargoes of Sicilian lemons began to arrive, and scurvy disappeared from Libya

* * *

Infectious diseases gave very little trouble only a few cases of typhoid and paratyphoid were recorded, as the troops had all been inoculated with my quadruple vaccine typhoid + paratyphoid A + paratyphoid-B + cholera The few cases that occurred were practically all among officers the reason being that the officers (including, I am sorry to say, medical officers) escaped inoculations much more easily than the ordinary soldiers

In 1940 a few cases of plague appeared among the indigenous population of Tripoli, but none among the troops Anti rat

measures and mass vaccine inoculation soon stamped out the disease

There were no cases of cholera during the whole course of the war

* * *

Ulcers of the leg were an extremely common complaint among both the Italians and the Germans and were a source of great discomfort to the sufferer However, as they were seldom incapacitating and the soldier was able to carry out his duties, they were not thought of much importance at head quarters, until one of the generals himself contracted the extremely annoying affliction I was then asked to devote some of my time to an investigation of the subject

If the reader [illegible] were four in number true tropical ulcer (rare), veld sore (fairly common), septic sore (very common), and tropicaloid ulcer (the commonest) They were all lumped together under the term tropical ulcer by the local doctors

The true tropical ulcer (*ulcus tropicum*) is a scourge of the torrid and tropical zones, its incidence gradually decreases in the subtropics and disappears [illegible] deep Occasionally it suddenly becomes inflamed, and a process of phagedenism develops which may destroy the soft tissues of the limb It generally heals spontaneously within two years, but may break out again later There is no specific treatment. The disease is believed to be due to an association or 'symbiosis' of two organisms a snake like spirochaete (*Spirochaeta vincenti*) plus a rod like fusiform bacillus (*Fusiformus fusiformis*)

At the beginning of this century, during the Boer War, it was noted that troops operating in desert regions often became affected with multiple sores which had no tendency to heal They received many names, the commonest being 'veld sore'. Harold Scott demonstrated that these sores were due to the true diphtheria bacillus Scott's conclusion was met with great scepticism at first. How could a skin ulcer be a form of

diphtheria? Everybody knew that diphtheria was a disease of the tonsils and throat However, Scott was proved right, and his researches have been completely confirmed in recent years

The diagnosis is made by bacteriological methods, which show the presence of the diphtheria organism (*Corynebacterium diphtheriae*), but at times it may be suspected clinically. If a patient has sores on the legs, and complains of palpitation and neuritis, or has lost his voice, or regurgitates his food, you may be pretty sure that the ulcer is of diphtheric origin—the toxin of the bacillus often affecting the heart and peripheral nervous system

Septic ulcer (*ulcus septicum vel pyogenicum*) was quite common It is superficial, and is due to the ordinary pyogenic cocci (*Staphylococcus aureus*, *Staph albus*, and *Strept pyogenes*) It answers well to a simple antiseptic lotion and the administration of the sulpha drugs

An ulcer which I called *tropicaloid* was extremely common in Libya between 1941 and 1943, taking a truly epidemic character and being confounded with true tropical ulcer and veld sore After the war it almost disappeared, but sporadic cases occur to this day not only in north Africa, but also in southern Italy, Spain, and Portugal

On one or both legs, between one and four (seldom more than four) superficial sores appear which are roundish or ovaloid, and are often partially or totally covered by crusts, there is some discomfort, but hardly any pain The regional glands are not enlarged, complications are exceptional, and the general health is not impaired Within three or four months the ulcers heal spontaneously, leaving blackish or whitish permanent scars I had the good fortune to discover the causative organism It is a pleomorphic bacterium which I called *Micrococcus vel Coccobacillus myceloides*, and there can be hardly any doubt of its being the real cause of the disease, as the inoculation of pure cultures of it in volunteers reproduces the typical ulcers During the war it was quite easy to find volunteers soldiers and sailors, tired and bored with the prolonged fighting, were only too pleased to enter a research ward and act as guinea pigs, with plenty of rest and food

Among the 'guinea pigs' I had a very keen young pupil, Dr Vincenzo Servino, now a well-known professor, who, however, during the experiment did not relinquish any of his many

duties To this day he bears on both legs the marks of his scientific zeal—a number of large, very dark scars where the ulcers were experimentally produced Servino, who has not yet developed [illegible]

Another 'guinea pig'—this time in Rome—was Biagio Urso, now also a distinguished professor He had a fall and badly grazed his leg Instead of disinfecting the bleeding surface, he applied to it an abundant smearing of my microbe Ten days later a typical tropicaloid ulcer developed

It is usual for bacteria, when cultivated artificially for years in the laboratory, to lose their pathogenicity—that is to say, they are no longer capable of producing the disease they originally caused Not so with this organism In 1954 I found a volunteer in Cascais, Portugal, and inoculated him with the strain I isolated as long ago as 1942 Quite a typical tropicaloid ulcer developed

Medical men interested in ulcers will find further particulars in my monograph *Little Known Tropical Diseases*, Lisbon, 1954

* * *

Myasis, or maggot infestation of war wounds, was fairly common. In the summer and autumn of 1942, a number of wounded soldiers [illegible] who had rem[illegible] or had been [illegible] of the nurses and nuns when undoing the bandages of these poor wretches innumerable white worm like maggots—one-half to one inch long—were crawling all over the wounds It was a sickening sight.

In the early 'twenties (I believe it was during the Spanish-Moroccan War) the theory had come into fashion that certain maggots (fly larvae) were not only harmless, but actually beneficial acting [illegible] I remembe[illegible] 26 being [illegible] where cert[illegible] wounds. I [illegible] brilliant results from such a method of treatment, which after a few years was officially abandoned

I happened to discover a very simple method of dealing with maggot infestation of wounds and bandages simply pour on plenty of ether—the same kind that was used for general anaesthesia The maggots' movements cease immediately, and most of them die If a few survive, a second douching of ether will complete their extermination

* * *

In Africa I had frequent opportunities of studying the mental and bodily reactions of soldiers and civilians exposed to bombardment and enemy action of various kinds The naval bombardments, by common consent, were considered the most terrifying and were the most dreaded Fortunately there were very few of them during the whole period of the war Air bombardments were a daily occurrence, but had much less influence on the morale of the population

Unexpected exposure to a burst of machine-gun fire was most unpleasant When driving along the Via Balbia this experience was not rare High in the sky you would notice a 'plane—so high that it was difficult to make out whether it was friend or foe Suddenly, like some great bird of prey, it would swoop down very low, and open fire The moment you saw this monstrous bird diving, you jumped out of the car or ambulance, rushed from the road for at least fifty yards into the desert, and took cover behind a bush If there were no bushes you lay flat on your stomach in the sand

Being suddenly blown up by a mine in the desert was another extremely uncomfortable experience, though it did not occur often, and oddly enough was seldom fatal

It was interesting to visit the shelters of Tripoli, Benghazi, Derna, and other towns during air raids Usually profound silence reigned, broken from time to time by the prayers of the nuns and priests One shelter came to be known as the 'Yawning Shelter', because during one raid a nun started yawning and this spread to all the other inmates After that, anyone entering the place and knowing its name, even if there were no raid on, would start yawning Another one was known as the 'Sneezing Shelter', the sneezing, however, was not so contagious as the yawning

My driver, a sergeant, when taking me on inspection tours

during air raids, often stopped the car abruptly if a bomb exploded nearby, got out, took off his jacket, pulled up his shirt, and scratched himself until he drew blood Then, much relieved, he would calmly return to the wheel He had no nettlerash or erythematous manifestations of any kind, the itching was purely of nervous origin. I did have a case, however, in which true nettlerash developed regularly directly the siren sounded

A middle aged officer confided to me that the sound of a distant air raid engendered in him erotic excitement which, however, quickly vanished when the bombs dropped nearer

A young infantry soldier suddenly lost his voice during a terrifying bombardment at Tobruk, and for two months remained completely dumb His voice returned as suddenly during another violent raid while he was in hospital at Derna.

The average individual exposed to bombardment or any form of severe enemy fire is assailed by an emotion which can be called 'fear', but he is normally able to control any external sign of it The greatest soldiers have all felt this emotion, and it may be said in truth that he who does not feel it is an abnormal person. I have come across only two such examples in the three wars in which I have taken part. The degree of this emotion varies widely, not only between individual and individual, but also in the same individual from day to day, according to the circumstances Many factors influence the emotional reaction if a person is in good health and in a state of euphoria, he may feel practically no sense of fear, but if he feels seedy or depressed he may be overcome by terror Repeated exposure to bombardment in some individuals diminishes their sensitivity to these events—it produces a sort of partial vaccination In others, however it has the *contrary* effect. It may sound far fetched, but weather has a lot to do with the feeling of courage and fear

I remember a young colonel in Albania, known for his daring —he had often parachuted behind the enemy lines—confessing to me the changes in his feeling of courage and ascribing the phenomenon to weather conditions

On a fine, bright day," he said, "I feel like a virile, full-blooded fighting cock, bursting with belligerence, capable of performing the most heroic deeds But on a rainy day I feel—

and I'm sure I look—like a wet chicken, and I have the heart of a chicken"

Very young children, as a rule, show no sign of fear When they are a little older they follow the behaviour of their mothers if the mother is calm, they will be calm, if she is nervous and hysterical, they will be likewise

It was interesting in Libya to study certain instinctive movements in individuals suddenly exposed to heavy air bombardment One of these was known as the 'head covering gesture' Suppose you were in your office writing, and suddenly you heard the alarm, your first *instinctive movement* was to grab the cap you had left on the chair next to you, put it on your head and push it down, then, feeling much more comfortable, you would continue with your writing Or suppose you were in the open, and suddenly a 'plane dived you would immediately lie flat on your stomach in the sand If you had left your helmet or cap in the car, you would put a handkerchief on your head, or, failing a handkerchief, your two hands—all instinctive measures to protect your head, although the actual protection amounted to *nil* What earthly good was a cap, or even the stiff regulation sun helmet, against a bomb?

In Tripoli, and later in Rome, I was able to carry out researches into the heart, digestive, urinary, and other functions, with the assistance of Professor Pullè, Dr Scotti, Dr Amalfitano, Dr Urso, Dr Servino, Dr Tobia, Dr Paroni, and Dr Cugliolo We found the number of pulsations greatly increased, but there were exceptions, and in one case it was *diminished* Systolic and diastolic blood pressure we found, as a rule to be increased Irregularities of the pulse were rare in one female patient, a beat of her pulse was missed each time she heard an explosion near the hospital A sensation of palpitation and discomfort in the heart region was occasionally noted, but not frequently In Tripoli we could not study the heart radiologically because the electricity was cut the moment the alarm sounded, immobilizing the X-ray apparatus In Rome, however, we were able to investigate the subject during air raids in July and August 1943, with the assistance of Dr Francesco Paroni expert radiologist of the Tropical Clinic of the University of Rome The heart shadow, especially the left portion, was always distinctly increased during a raid, to become normal again after twelve to twenty four hours

In the few cases in which investigations of the blood were [illegible]

Digestive symptoms were rare, and urinary symptoms not very common A stimulus to urinate was occasionally increased during a bombardment in Tripoli which lasted six hours, a woman had to leave the shelter sixteen times

Pathological conditions in most patients were aggravated by bombardment tuberculous patients very often had haemoptysis But there were exceptions In a woman admitted to the General Hospital in Tripoli with fully developed rabies—convulsions, inability to swallow water, attempts to bite the attendants—all the symptoms disappeared during a heavy raid at night which lasted for more than four hours As soon as the raid ceased the symptoms reappeared, and the poor woman was dead twelve hours later

In the lunatic asylum, the patients apparently took no notice whatsoever of air raids, these had no effect either in allaying or in aggravating the symptoms

Should there be any medical reader interested in the subject, he will perhaps find it worth while to read our detailed report in the *Commentationes* of the *Portifica Academia Scientiarum* (Vol 9, No 14, 1946)

* * *

On July 25, 1943, Mussolini was deposed and Badoglio became Prime Minister The war dragged on and everyone was weary and sick to death of it The majority of Italians had never had their hearts in it they fought because they had to

At the Supreme Command I knew the new Chief of Staff, General Ambrosio, and also General Castellano, the man who was later sent to Portugal to arrange an armistice From a medical point of view there was not really much to do at the Supreme Command on the whole, the health of the Italian troops in all theatres of war was good, and material and drugs in military hospitals were not lacking, though very scarce in civilian hospitals. I carried on with the Directorship of the University Tropical Clinic, partly transformed into a military hospital.

There were some air raids about this time—a severe one on

the 19th, and another severe one on August 13 In one of these the Tropical Clinic was badly hit, but was still usable and we continued our researches

I was at the Tropical Clinic on September 8 when sudden *sounds of jubilation* were heard outside, and a great cheer went up in the wards The armistice had been declared All over Rome there was fervent enthusiasm German and Italian soldiers were seen in Piazza Colonna embracing each other and cheering wildly A few hours later, however, disillusionment came to the Germans, when it became clear that Italy had sought an armistice without the knowledge or permission of her *ally*

On the same night, King Victor Emmanuel and the Govern ment left Rome There followed a period of great confusion The Supreme Command had vanished, there was no recog nized authority in the city, Radio Rome was silent, the shops were closed Artillery and rifle fire was heard in the distance the Germans had started shelling Rome There was much criticism of the Government for their sudden departure without delegating authority to anyone "We have been left in the lurch," was the expression used

On the 10th, proclamations were pasted on the walls of the city, signed by Marshal Caviglia, he said that, as the senior army officer in Rome, he had taken command of the city and was negotiating with the Germans to evacuate it The following *day, in the afternoon, another proclamation appeared on the* walls it was signed by General Calvi di Bergolo, Commander of Rome, and stated that the Germans would consider Rome an open city Calvi did his best to maintain a semblance of Italian authority in Rome He was Victor Emmanuel s son in law, having married Princess Yolanda, the King s eldest daughter

Calvi was suffering from a mild sub chronic complaint, and I went daily to see him at his office I admired the cool manner in which he carried out his difficult task, helped by Colonel Giuseppe Montezzemolo His greatest worry was the fact that the Government had left Rome without leaving any definite orders he *tried to get in touch with them many* times through secret radio, but never succeeded The few troops remaining in the city did not know what to do one moment they were being told to fight the Germans the next to remain quiet

The result was confusion and panic Most of the soldiers abandoned their units, borrowed civilian clothes, and went home

On September 12 eight German gliders, carrying eighty eight picked men under the command of Otto Skorzeny, set out from an airfield near Rome towards the Abruzzi, where it was known that Mussolini was kept prisoner in a hotel on the highest Appenine mountain Skorzeny was in the first glider after a crash landing on the steep stony hill near the hotel, he ran towards it followed by his men and snatched the Duce from his unsuspecting guards, who, completely bewildered by the sudden attack, did not put up any resistance Mussolini was taken to Germany, where he saw Hitler, and a few days later he became head of the so-called Social Republic of Salo, he was merely a puppet in the hands of Germany

In Rome army and navy officers were given the option either of pledging themselves to the Fascist Social Republic of North Italy, or of resigning and being sent to Germany as prisoner I, of course, resigned and all m
ized in the army
great majority o
faithful to the King A few, however, chose to serve the newly founded Mussolini Republic, they included two famous generals whom I knew well—Graziani and Gambara I was shocked at their decision but it was probably due to their influence that very few of the great number of officers who had resigned were sent north by the Germans or imprisoned

On September 19 six German soldiers were killed by unknown individuals Marshal Kesselring ordered Calvi to give him a list of 6 000 prominent citizens as hostages Calvi put down his own name first and that of Montezzemolo second—and no others On the 23rd he was arrested Montezzemolo had already disappeared

On March 23 1944 I was walking down Via Quattro Fontane when I heard a sudden loud explosion, and saw people running In no time German soldiers appeared on the scene I quickened my steps for in those days we always kept well away from a G

do

occupants of every house interrogated, and a number of them taken to the Gestapo headquarters

The Germans took a horrible reprisal On March 24, 335 political prisoners who had had absolutely nothing to do with the event—among them my friend the legendary Colonel Giuseppe Montezzemolo—were taken in trucks to a disused quarry a few miles out of Rome (the Fosse Ardeatine) and there all killed The details of the slaughter were given by Obersturmbannführer Kappler of the S S, who was in charge of the operation The prisoners were made to kneel down five at a time with their hands bound behind them, then they were shot in the backs of their heads Sixty-five batches were so executed, the slaughter continuing the whole afternoon The bodies were left in heaps in the cave, which was then blown in

* * *

During this period I was called several times to the Vatican to see the United States Chargé d'Affaires, Harold Tittman, whose boy was ill, and once or twice to see Sir d'Arcy Osborne, British Minister to the Holy See Both were charming men and able diplomats, and both had been shut up there since June, 1940

In proclamations posted on the walls in many parts of Rome, the Germans had forbidden any Italian to enter the Vatican under pain of imprisonment, or worse However, I went there regularly in the company of a well known young Monsignore, a friend of mine, who drove me in his small Fiat On approaching Piazza S Pietro, I would muffle myself up to the ears and pull my hat low over my face Only once were we challenged by the grey-clad, steel helmeted, jack-booted German sentries pacing the square, but seeing the distinguished-looking cleric at the wheel they let the car proceed Entering the Vatican was like entering another world—a world of tranquil peace and calm I enjoyed these visits

The size of the Pontifical Army increased greatly during those few months No one wanted to join Mussolini's army, so, to avoid arrest, young men of military age would secretly take refuge in the Pontifical Palace and ask to be enlisted in the Vatican Forces Quite a number were accepted The Catholic Church traditionally extends charitable help regardless of poli-

tical opinion, and in those days it was we monarchists who needed protection

During the last days of German domination we lived a very hectic life My clinic was full of pseudo-patients—men and women under fictitious names and diagnoses, some of whom were under sentence of death I no longer had my meals at the clinic or slept there at night I was indebted to the then Minister for Ireland, and to His Excellency Gregorcea, Minister for Roumania, and his wife for much hospitality

Many people feared that there might be a period of mob rule and looting between the departure of the Germans and the arrival of the Allies, as has happened so many times in similar situations The following scheme was mooted to meet the contingency the setting up of a temporary diarchy, composed of the Grand Master of the Order of Malta, Prince Chigi, and Marshal Bastico, with the support of the general commanding the Colonial Police (General Presti), which had become the City Police (the whole force was pro-Allies) Prince Chigi, whom I was asked to approach as I knew him well, accepted the scheme, which was elaborated in the minutest detail by an extremely able young Staff officer, Colonel Bertone, who had been A.D C to Bastico in Africa However, the departure of the Germans towards the north and the arrival of the Allies from the south was practically contemporaneous, and there was no need to put the scheme into execution

* * *

The first Allied troops to enter Rome, on June 5, 1945, were Americans of the Fifth Army commanded by General Clark, and they were received with [illegible]

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flags fast in their arms The American troops behaved extremely well, not a single case of looting or violence was reported They were on the most friendly terms with the populace and generously distributed their rations, cigarettes, and chocolate among Italian citizens

General Clark nominated Brigadier General Hume Governor

of the city. Hume was originally a medical officer, and I had known him for years; we were good friends. He was a man of great ability and of a generous nature. He appointed me Senior Consultant in Medicine and Public Health to the Allied Military Command.

While he was Governor of Rome, it devolved upon him to appoint a Lord Mayor, and after asking the advice of several of his Italian friends, including myself, he chose Prince Doria. He wrote a speech of presentation and asked me to correct the Italian, which I did. In his speech he said that "the United States had but two objectives in Italy. First, to defeat the enemy and drive him from the country; second, to do what we can to help Italy return to her normal way of life."

Unfortunately, Hume soon left Rome to become Governor of Florence and Tuscany; his place was taken by an Italo-American called Colonel Poletti, who in civil life had played a minor role in New York politics. He was far from being a man of Hume's stature, and his brief rule in Rome was not a success. Reversing his predecessor's policy, he started a persecution of members of the so called 'intelligentsia', and signed a decree removing from Rome University all professors who had served in either the Ethiopian or the Second World War—the Fascist wars, he called them. I, of course, was one of the victims, for I had served in both; another was the celebrated surgeon, Professor Paolucci, and there were several others. However, thanks to the help of Hume (although he was not in Rome at the time) and many American friends, and the benevolent intervention of the Vatican—especially that of one well known and warm-hearted Cardinal—I was reinstated within six weeks as Professor and Director of the University Tropical Clinic. Well-known anti-Fascists came forward in my defence, among them Marchese della Torretta, President of the Senate, and Bergamini, the famous editor of the *Giornale d'Italia*. I received support also from Republicans, Socialists, and even Communists. I had friends in many different political parties because, although of strong monarchical leanings, I have always respected other people's political opinions if they are held in good faith. Moreover, scientific work had always attracted me far more than politics. A great asset in my favour was that I had been offered a professorship in Italy as far back as 1914, years before Fascism came into being.

About a year later, Professor Paolucci and all the others who had been dismissed were reinstated

In those six weeks of disfavour, I came to know who were my friends and who were not The widow of Piero Colonna (sometime Governor of Rome, and a member of the oldest Roman family) gave me rooms in her own palace, where I could see patients who could no longer come to the Clinic Most helpful also were my friends the Serriston, the Bossi Pucci, and the de Gregorceas All my university assistants and hospital staff remained loyal The Prince of Piedmont, then *Luogotenente* acting for the King, showed his never changing generosity towards me he insisted that I should continue to live in the Quirinal Palace and carry out my medical duties there Lucifero, able Minister of the Royal House, helped me greatly

A little later the Government, composed chiefly of Republicans, Socialists, and Communists, appointed an 'epuration commission' to investigate the political activities of all the sena- [illegible]

[illegible] I had been once since 1929—about four hundred lost their seats In my case, the investigating commission found that my political activities in connection with the Senate had been very slight indeed only once in twenty years had I spoken, and my speech was on a non political subject 'Vivisection as a necessary evil for the progress of science' (A bill had been presented by the Government to abolish all experiments on animals, it was the work of a certain Minister keen on ingratiating himself with a glamorous foreign lady who was a rabid anti-vivisectionist another example of the correctness of the French dictum '*Cherchez la femme*')

I retained my seat, and I was very pleased to remain a member of the Senate I wonder sometimes whether the memory of the little I had done for his sick children many years previously in Corfu may not have influenced Sforza in my favour

The Times of February 28, 1946, carried this notice

"*From our own correspondent, Rome* Dr Aldo Castellani, whose fame as an expert in tropical medicine is world wide, has been absolved by the investigating commission of charges

of the city Hume was originally a medical officer, and I had known him for years, we were good friends He was a man of great ability and of a generous nature He appointed me Senior Consultant in Medicine and Public Health to the Allied Military Command

While he was Governor of Rome, it devolved upon him to appoint a Lord Mayor, and after asking the advice of several of his Italian friends, including myself, he chose Prince Doria He wrote a speech of presentation and asked me to correct the Italian, which I did In his speech he said that "the United States had but two objectives in Italy First, to defeat the enemy and drive him from the country, second, to do what we can to help Italy return to her normal way of life "

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very fond of the poor little wretches, and they returned his affection. It was touching to see some of them, completely blind, led to the Prince, who caressed and petted them while they climbed on his knee and put their arms round his neck

The Prince and Princess of Piedmont also decided to open an outdoor dispensary in the Royal Palace, and asked me to organize it. It was a successful enterprise hundreds of people from the *Trastevere* (the East End of Rome) and other populous quarters of the city flocked every morning to be treated Once, when the Prince of Piedmont paid a visit to the place, he was immediately surrounded by a surging crowd of patients, mostly women, who embraced and nearly suffocated him He was rescued by one of my assistants and myself and left the dispensary by a back window leading on to the roof of a neighbouring building

* * *

June 3, 1946, was the day appointed by the Allies for the plebiscite Would it be a victory for the monarchy, or would it mark its end?

An optimistic atmosphere prevailed at the Quirinal, and most of us were hopeful about the result. As it turned out, however, the Monarchists lost by a few votes, and the Republic of Italy came into being

Was the plebiscite carried out as impartially as it might have been? There were many who thought not A great number of people were deprived of the right to vote, they included the four hundred senators who had lost their seats, the hundreds of thousands of Italian prisoners still abroad, and the Italians of Trieste and Dalmatia

There were also rumours that in the high spheres of the Vatican (not the Holy Father) there was some sympathy for the Republic—that some narrow minded, high ecclesiastics still nurtured a grudge against the House of Savoy because Umberto's great grandfather, King Victor Emmanuel II, had invaded the Pontifical States in 1870 and made Rome the capital of the Kingdom of Italy I have never believed those rumours.

Had the Allies agreed to postpone the date of the plebiscite for three months, as many Italians suggested should be done, I

brought against him of collaborating with Fascism He therefore retains his seat in the Senate and his Chair at Rome University, as well as other high appointments in the Italian scientific and cultural world"

After this I returned to my routine daily life, spending most of the day in the University Tropical Clinic doing clinical and research work At times I was called out of Rome for consultations once I had to go to Florence It was sad to see the large old quarter of the city near the River Arno turned into enormous heaps of rubble it had been mined and destroyed by the Germans before they retreated The panorama of Florence was completely altered all the bridges had been blown up by the Germans, except the *Ponte Vecchio*

The Americans were extremely kind to me, and I may say the same of the British Sir Noel Charles, British Ambassador in Rome, told me that two years previously he had advised King Victor Emmanuel III, Umberto's father, to abdicate in favour of his son The King did not agree to this, as he considered it non constitutional a new king had to swear an oath of obedience and fidelity to the constitution before the two houses of parliament, and at the time the Lower Chamber was non-existent and the Senate was not working properly

Admiral Stone, representative of the United States and President of the Allied Commission, and also the General in command of the American Air Force, were both of the same opinion as Sir Noel Charles, they were full of praise for Prince Umberto and his statesmanship, and deplored King Victor Emmanuel's reluctance to abdicate Not till June 4, 1945—the date of the 'liberation of Rome'—did the King delegate his sovereign powers to the Prince Nearly a year later (May 9, 1946) he abdicated and went into foreign exile in Egypt

* * *

In the spacious gardens of the Royal Palace were several villas used for visiting royalties In January 1946, the largest and finest of these was transformed, by order of the *Luogotenente* (Prince Umberto), into a hospital for children blinded or severely crippled during air raids The staff consisted of doctors and nurses of the Order of Malta Prince Umberto was

CHAPTER XII

ESCORTING A QUEEN INTO EXILE

FRAGMENTS OF A DIARY

THE SCENE UNFOLDS in Rome, in the most magnificent royal palace of Europe—the Quirinal The day is June 5, 1946, two days after the plebiscite, the hour eight thirty in the morning

There is a knock at the door of my apartment, which is next to that of the royal children I open the door It is Commendatore Nardi, one of the King s secretaries, who announces "His [illegible]

accompany the Queen and the four royal children to Portugal A few weeks ago I had placed myself at his disposal in the event of the Referendum going against the Monarchy

I called for my good valet, Furlan, who had been on the Quirinal domestic staff for years "Furlan," I said, "pack my bags at once, I must leave at half past two" The news came as such a shock to him that he seemed momentarily stunned, and in his hurry and state of depression he forgot to pack several essential articles

I rushed out of the royal palace in a last minute attempt to put my own affairs in order I went for a moment to the Senate to see the President, Marchese della Torretta we had been close friends since the days when he was Italian Ambassador in London I found him in despair over the result of the Referendum I then went to the university to see the Dean of the Medical Faculty, Professor Vittorio Puntoni, who, as ever, was sympathetic and helpful

At 2 p m. I was back at the Palace At 2 30 a valet called for me, he took me to one of the inner gardens where the King and Queen often went for short strolls The King was there, also Aimone, Duke of Aosta, and Lucifero, Minister of the Royal Household. A few minutes later three Gentlemen of the Court appeared—among them Uberto Bossi Pucci—and one of the Ladies, Countess Guandeline Spalletti Crivelli.

personally have no doubt that the results would have been different. Umberto, endowed with all the qualities that go to make a great king, had made himself extremely popular during the few weeks he was on the throne, and his popularity was increasing daily by leaps and bounds among all classes of the population As a man and a sovereign, he is on a plane of his own

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There is a knock at the door of my apartment, which is next to that of the royal children. I open the door. It is Commendatore Nardi, one of the King's secretaries, who announces: "His Majesty wishes you to be ready to escort Her Majesty on a long journey, starting at two-thirty this afternoon."

I understood immediately that His Majesty wished me to accompany the Queen and the four royal children to Portugal. A few weeks ago I had placed myself at his disposal in the event of the Referendum going against the Monarchy.

I called for my good valet, Furlan, who had been on the Quirinal domestic staff for years. "Furlan," I said, "pack my bags at once, I must leave at half past two." The news came as such a shock to him that he seemed momentarily stunned, and in his hurry and state of depression he forgot to pack several essential articles.

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His Majesty walked a few steps with the Duke of Aosta, and talked at length with the Minister of the Royal House. Shortly afterwards the Queen arrived, tall and regal, composed and smiling sadly.

The royal cars were waiting a few yards off. The Queen entered the first car; next to her sat the Countess Spalletti, and facing them I took my seat. The car moved, and as suddenly stopped: Signorina Zanchini, a senior Red Cross sister, came running up, weeping as she bade the Queen farewell.

Twenty minutes later, with the royal children following behind, we arrived at the airport of Ciampino. It was a quick flight to Naples; it seemed only moments. Alighting from the 'plane, the Queen, Countess Spalletti, and I drove to Reggia di Capodimonte. There, waiting for the Queen, were the three Duchesses of Aosta: the Dowager Duchess; the Duchess Anna, widow of Duke Amedeo, sometime Viceroy of Ethiopia; and the Duchess Irene. What a noble figure is the Dowager Duchess, tall, slim, and erect, the silvery whiteness of her hair enhanced by her deep mourning. She led the Queen to another room, where they had a long talk in private. Countess Spalletti and I, with the two young duchesses, remained in the small salon, listening to the radio. The usual unhappy news. . . . Irene said: "This is my third experience of sudden enforced departure—twice in Greece and now in Italy." She bade her young son—an intelligent-looking little boy of three or four years—shake hands with us. I was struck by the size of his head, which seemed to be much larger than in most children of his age.

After what seemed a long interval the Queen and the Dowager Duchess reappeared, and there followed a sad farewell. Her Majesty, accompanied by Countess Spalletti and myself, then drove to the Villa Maria Pia, where the royal children had already been conducted.

Soon after dinner a telephone message came through from Rome, instructing us to be ready at 4 a.m. to go on board the cruiser that was to take the Queen into exile. Except for the royal children, no one went to bed that night. A throng of people came to take leave of the Queen. Sorrow was stamped on every face, and there were tears in every eye. It was a sombre night of sadness I shall remember all my life.

Punctually at four in the morning we left Villa Maria Pia. Ten minutes later we arrived at the harbour, and embarked

without delay in the *Duca degli Abruzzi, Luigi di Savoia*, a fine cruiser moored alongside one of the piers It was one of the few Italian warships still afloat, and had been placed at our disposal by the newly formed Republican Government The Commander, Captain Rossi, and the senior officers were at the top of the gangway to greet the Queen Her Majesty talked to the Commander for a few seconds before being escorted to her quarters, normally those of the Admiral

During the voyage, at meals, there sat at Her Majesty's table the Captain, the Duke and Duchess of Genoa, the Duke and Duchess of Ancona, Countess Spalletti, and myself The conversation was always on general subjects, never politics

Little Prince Vittorio and the young Princesses, Maria Pia, Maria Gabriella, and Maria Beatrice, enjoyed themselves hugely on deck, romping about and playing happily, they made many friends among the sailors

Captain Rossi was a typical naval officer, simple and gentle manly in manner During the voyage I closely observed the [illegible]

dark scowls

On June 9 we arrived at Lisbon, towards three o'clock in the afternoon. The Italian Minister, Marchese Alberto Rossi Longhi, came on board with his wife and the Air Attache, the Chief of Protocol of the Portuguese Foreign Office, Henriques Quaresma Vianna, also came on board to greet the Queen When we left the ship the whole crew was lined up a few sailors saluted and some were tearful, but on the whole it was a cold send-off

Less than an hour's drive through picturesque, hilly, and wooded country brought us to Piedade, a tiny hamlet near Colares The cars entered a private road leading to the imposing 'Vila Bela Vista', belonging to the Duchess de Cadaval The Duchess had placed it at the disposal of Their Majesties at the instance of her daughter in law Marchesa Olga de Cadaval

Over a disconsolate dinner we talked dolefully about the political situation in Italy Who would have expected a Republican majority in the South and in Sicily? The villa was beautiful but very cold, and there was no electric light, so we had to use candles We had been informed that one of the

bedrooms was haunted, but the ghost had been exorcised by a priest the previous day, and therefore one could sleep there quite peacefully. Nobody, however, seemed very anxious to have this room, and I was unanimously invited to occupy it. I was delighted, because in a rapid inspection I had made of the house I had noticed that it was the only bedroom with a bath room. I am no believer in ghosts, but I must confess that I left the candle burning throughout the night, so that all that remained of it in the morning when I awoke was a small stump, still flickering, encircled by stalagmites of molten wax.

June 10, 1946

Commendatore Nardi, a very efficient person who is a sort of Secretary-General *cum*-Treasurer to the Royal House, complains loudly about the disastrous financial position. "We are ruined," he moans. "The Republican Government has confiscated all the properties held by the King in Italy." He goes on, "And now, to crown it all, twelve hefty Portuguese policemen have arrived at the villa endowed with gargantuan appetites: they want three big meals a day, which, they declare, must be 'royal meals'. Little do they know that the meals of the King and Queen, even in the Quirinal, are very simple indeed—a small piece of fish or meat and some fruit, that's all."

The King is expected tomorrow or the day after. I remarked to Nardi, "How will His Majesty, with his powerful brain and so used to a life of intense activity and responsibility, settle down to the existence of a gentleman farmer?"

Nardi replied, "Haven't you noticed the large wooden cases upstairs which came with us? They contain secret archives—chiefly the correspondence between Victor Emmanuel II and His Holiness Pope Pius IX, during the period 1860–1870. His Majesty is a born historian: here he will have the leisure and opportunity to study these documents, and later, perhaps, he will publish a fascinating book."

June 11, 1946

Miss Smythe and other members of the household came running to me excitedly this morning to tell me that my name was in the *Daily Mail*. It was, in truth, but the account of the departure from Naples of the Queen and the royal children, escorted by me, was somewhat inaccurate. According to the

correspondent, Field Marshal Badoglio had been present, weeping In point of fact, the Marshal was not in Naples at all, and if he wept it must have been in his spacious villa in Rome

The royal children are very fond of each other, although naturally from time to time they have their squabbles They are always roaming in the garden and the park Vittorio sports an air-gun, in Rome he had a real small gun with which he once killed a bird in the garden of the Quirinal, and proudly showed it to me He is a most attractive child whom one cannot help loving, he is much less shy than when in Rome, and is for ever asking questions, always intelligent ones

The three princesses are little darlings Maria Gabriella, aged six, is lovely golden haired and blue-eyed, and with a gentle disposition Maria Beatrice is three, a winsome child, full of character Maria Pia is eleven, good looking and bright, with an enchanting smile that lights up her sweet, pale, oval face, and chiselled Grecian features, she has dark eyes and lustrous raven black hair She converses with grown ups in an interesting and vivacious manner, she is very cultured for her age In Rome, I used to enjoy watching her at those few official functions to which she accompanied her parents her deport ment was perfect, gracious, and friendly, but at the same time most dignified

June 12, 1946

Nardi is moaning again about finances funds are exceedingly low Not only has the Republican Government confiscated all the royal properties in Italy, but it has applied to the High Court in England to prevent the funds which were deposited in that country several decades ago by Umberto's grandfather from being handed over to the legitimate heir "I believe in British justice," I said to Nardi "It will be all right." My belief does not seem to be generally shared (A few months later, however, I was proved to be right.) The atmosphere is full of gloom Means of making a little money are discussed

'Why don't we open a clinic?' someone suggested brightly There was a chorus of replies "Because it won't pay Castellani has the peculiar habit of never sending bills!'

Countess Spalletti, that sweet, ever gentle Lady in Waiting to Her Majesty, then addressed me 'Why don't we start a beauty parlour and cosmetic salon? It's common knowledge

that you have some wonderful recipes for creams and lotions I've tried one of them for my hands, and it is excellent"

There is general enthusiasm for the idea Then a chilling voice is heard "And who's going to provide the capital to rent a laboratory, buy the basic materials, and pay for publicity?" Regretfully the scheme is abandoned

June 13, 1946

In the afternoon we began anti typhoid inoculations, starting with the nursery maid who looks after the youngest princess, Maria Beatrice, she is a nice girl of about thirty, with abundant curves She sometimes loses her patience with Maria Beatrice who, like every child of her age, is occasionally obstreperous and capricious, and gives her a gentle slap on the hand The little princess howls, and her howling can be heard all over the house, as if she were being savagely ill treated

June 14, 1946

Today King Umberto arrived by air from Rome What pity —and admiration—this young sovereign inspires, who, after having worked so hard for his country, has lost his throne He *shook hands with all who were waiting for him at the gate of* the villa, then the children took hold of him and dragged him into the garden They adore their father, and he is exceedingly fond of them

A little later the King's suite arrived They gave us some interesting information during the last two or three days, there had been a tremendous revival of enthusiasm for the King among the popular classes of Rome A crowd of 'Trasteverini' (people of the East End) invaded the palace, demanding to see him They surged up the main staircase to the antechamber of his study, and both men and women—many hysterical—rushed at him when he appeared, embracing his knees and crying, "Don't leave us!"

On the night of the 12th, the King had dinner with some old friends, the Barzinis There were also present Marchese della Torretta, President of the Senate, Bergamini, a prominent senator and journalist, and several other personalities The atmosphere was optimistic It was hoped that the Government would agree to a recount of the plebiscite vote under the control of the Supreme Court of Justice At 10 p m Barzini asked His

Majesty's leave to absent himself for an hour, in order to pay his customary nightly visit to his office—he was editor of a Roman newspaper—to confer with his sub-editors He returned [illegible]

which were transferred to the hands of the Prime Minister, Alcide de Gasperi The King was no longer king—he had become a private citizen, and liable to arrest

Several of those present at the dinner were in favour of resistance "Why take it lying down?" exclaimed one of them, a junior ex member of the Government. "The Carabinieri are loyal to a man, and most of the army and all the navy are for us Say the word, Sir, and we will arrest those damned politicians, whether hypocritical Christian Democrats or lunatic followers of Stalin. Recall Badoglio, and reinstate him as Prime Minister"

This, of course, meant civil war The King replied, "I will not allow my hands to be stained with a single drop of Italian blood, even if it be Communist blood"

Soon after, he departed and proceeded to another friend's house to pass the night. The following day he left Rome by air for exile

Sunday, June 16, 1946

In the morning little Vittorio came running to see me "There are some *belve feroci* (ferocious beasts) in my bed," he said "Look!" His arms and legs were covered with large red swellings The nursery maid had actually found one of the *belve feroci* in his bed, and brought it to me *Cimex lectularius* The tin of D D T powder given to me as a parting gift by General Brady came in very handy

After mass in the little church of Piedade, on the way back to tha Villa, I had a most interesting conversation with Princess Maria Pia She said, "I go willingly to church I should like to go even [illegible]

[illegible] replied Yes, often But when one is grown up, one has so many other duties, and I don't think it will be possible for me to enter a convent"

In the evening the Count and Countess of Barcelona came

to dinner As soon as Don Juan perceived me, he opened his arms wide and embraced me, recalling the time when I had attended him in London fifteen years before, when he was a midshipman in the British Navy While on a visit to India he had contracted a most obstinate tropical fever which recurred every few months He is an extremely friendly, warm hearted young man, but it is his straightforwardness that especially appeals to me

That night he spoke very frankly about affairs in Spain, where the army is monarchist, but loyal to Franco The majority of Spaniards also favour the monarchy, but believe that, for the time being, Franco should remain in power Someone exclaimed "Let the history of General Monk repeat itself Bestow a dukedom on the *Caudillo*, and request him to go into gracious retirement " Don Juan let the subject drop He is far too intelligent, I am sure, to think that Franco is the type of man who would willingly, or docilely, play the part of a second General Monk And Don Juan is too great a patriot to run the risk of plunging his country into civil strife again

Several ladies of the Spanish and Portuguese aristocracy were among the guests Once more I noted how our Queen's personality effaces that of everyone else, even when she is silent she outshines them all In her nature are combined a powerful, almost masculine intellect, a vivid mind, and a deep kindliness of heart, though this last quality is, unfortunately, sometimes hidden beneath a cold exterior

It has been my privilege and good fortune to serve Her Majesty for many years, and I have been witness to numberless generous actions on her part, about which the public know nothing Here is one example about two months earlier, in Rome, Her Majesty was due to attend an official dinner at the Quirinal at nine o'clock (when the Sovereigns were alone they dined at eight) At eight thirty she was ready, in a rich evening gown and magnificent jewellery, when a sudden call came through from the Marchese Lucifero, Minister of the Royal House, to say that the young son of a poor woman in Rome's popular quarter, the *Trastevere* had been severely wounded in a political demonstration, and had been taken to the hospital of San Giacomo The boy s life was in danger, and the mother, almost out of her mind, was crying that only the touch of the Queen's hand could save him The legend of the Queen's heal

ing touch began, it will be remembered, during the Ethiopian War

The Queen removed her jewels and changed into a simple dress She herself telephoned to my apartment in the palace and requested me to accompany her to the San Giacomo Hospital We left the palace by a side door, where the Minister's car was waiting, and drove straight to the hospital, only to find on arrival that the unfortunate youth had died Instantly the Queen decided to go and console the mother

Finding the house was not such an easy matter We drove through the dark narrow streets of *Trastevere*, until we came to an alley too narrow for the car Without escort, we walked down the ill lit alley, past scowling, sullen faces, until we eventually discovered the house The rickety wooden stairs were in complete darkness, we climbed them by the light of my torch, which I had fortunately brought with me At the top of the landing a door was opened, revealing a small, crowded room In the centre of the room, seated in a dilapidated armchair, a middle aged woman was weeping distractedly and calling her dead son's name The Queen gently laid her hand on the woman's shoulder and said a few words of consolation, and she gradually calmed down Somebody whispered to the Queen that she had suffered from heart trouble in the past, and they were afraid she might die from the shock of her son's death Her Majesty made a sign to me, and I listened to the woman's heart. I could discover no valvular disease, but of course the heart was beating tumultuously, and I gave her a soothing tablet.

Twenty minutes later Her Majesty left. Outside, the little alley was blocked with people, but now they were no longer scowling they were smiling and cheering Followed by the crowd we walked a couple of hundred yards, found the car, and reached the Quirinal at eleven that night.

June 17, 1946

The children have heard about the haunted room They do not appear in the least frightened, but I have noticed them looking at me intently from time to time Last night I retired to bed at eleven, and in bed, by the feeble light of my candle, I began reading an old number of *The Times* All at once the silence was shattered by strange noises—windows shook and doors rattled all over the house My windows flew open, and the draught

blew out the candle In the darkness, at the fanlight over the door of my room, I could see a little ash white face, with black circles painted round the eyes in an attempt to look ghost like, and a tiny black gloved fist violently hitting the glass

I could not help laughing I cried in a loud stern voice 'I have a most powerful medicine for ghosts—castor oil' The ghost ran away, but returned a few minutes later I threateningly repeated my exorcism, and the spectre's disappearance was then final The pseudo ghost turned out to be Prince Vittorio, who reached the fan light, I regret to relate, by standing on the shoulders of his august father The accomplices responsible for the terrifying uproar were his sisters and the gardener s boy, who had been bribed to push my window open from the outside

June 18, 1946

After dinner the conversation turned to the deep reverence which Hindus have for animals, particularly cows I told the story of my little white cow in Ceylon I had bought her in order to have fresh milk every day, and there is no doubt that *she was a nice, cleanly, lady like creature* One day, during a Hindu festival, I saw a group of Indians in earnest confabulation in the compound outside my bungalow One of them came up to the verandah, where I was sitting, and in his peculiar broken English very respectfully addressed me "Your Honour, *I have, on behalf of myself and my friends, to ask a great favour* of you "

' I shall be delighted to oblige you, if I can "

' Will Your Honour allow us for a little while to enjoy the company of your divine cow? She is so beautifully white, she appears the embodiment of all that is innocent, sacred, and virtuous, and, today being our great religious feast day of the year, we desire to pay homage to her "

I called the head boy and told him to take the cow from the shed to where the Indians were They assembled in a circle round the cow, and for a long time were bent low, murmuring a litany of prayers, and finally prostrating themselves upon the ground Then they rose and slowly withdrew, bowing profoundly, *first to the cow, then in a lesser measure to me*

I went on speaking of Ceylon I mentioned the lizards which abound in the Galle Face Hotel and the houses of Colombo

They are graceful, attractive little creatures, with bright beady eyes they do not evoke repulsion, and one soon becomes accustomed to their presence The only trouble, which happens on occasion, is when one of them falls from the ceiling into the *décolletage* of a lady's gown at a ball, or into the soup tureen at an official dinner

Much worse than lizards—disgusting as well as dangerous—are the gigantic spiders so often seen on the ceilings and walls of bathrooms If one of these creatures drops on to a person, it causes the most violent dermatitis and symptoms of poisoning

June 19, 1946

At dinner, an amusing story was recounted by a courtier who had attended the last Mass celebrated in the Quirinal Chapel before the King's departure. It was the custom at the chapel for the officiating priest, at the end of the Mass, to recite a prayer in which thanks were offered to the Almighty for the constant protection extended to the Royal House The priest read the prayer from a printed card

Monsignor B , who happened to be officiating that day, omitted the prayer On being asked after Mass his reason for doing so, he replied "My conscience objected, the Almighty should have behaved differently, it would have been *quite easy* for Him to prevent a Republican majority "

June 20, 1946

Speculation about who will be President of the Republic. The names of de Nicola, Orlando, de Gasperi, Einaudi, Sforza, and many others are mentioned by the entourage, often accompanied by uncomplimentary and derisive remarks But not a word of criticism or rancour escapes the King's lips, if he speaks at all, it is only to allude to the good qualities of the bearers of those names He is a *saint*![1]

Over and over again I ask myself ' Why has destiny willed the downfall of th[illegible] kingly [illegible] he has [illegible] bears th[illegible] than he [illegible] of the country, and act as supreme moderator in party strife?

Far from me to advocate absolutism I favour a constitutional

monarchy as it was at one time in Italy, and as it still is in fortunate Great Britain. Absolute power held by one person, be he king or dictator, always leads to disaster in the long run. And, deep in my consciousness, I realize that my fervour for the monarchical regime has perhaps more to do with the person who sits on the throne than the throne itself. Would I be so ardent a royalist, I wonder, if, instead of Umberto of Savoy, my country's king were a monarch of the Ruritanian or neo-Pharaonic type?

June 22, 1946

In the afternoon I had the pleasure of having tea with the Marchesa de Cadaval at her Colares villa. Her mother, the Countess Robilant, was there: a very aristocratic old lady, tall, erect, and rather thin, with a domineering and somewhat imperious expression. She was born a Mocenigo of that illustrious Venetian family which gave seven doges to the Republic.

Among those present was a White Russian, a smart, grey-haired, very military-looking gentleman, who, on being asked whether he preferred Indian or China tea, calmly replied: "Neither, thank you. A whisky and soda, if you please."

During tea, the conversation strayed to bull-fighting. In contrast to Spanish usage, in Portugal the bull is not killed, though the matador runs the same risks as in Spain. For generations the Cadaval owned a famous breed of bulls, which they exported to Spain for fighting. In order to produce aggressive bulls, their future mothers were chosen from the wildest and worst-tempered heifers (who were always used and goaded in fights instead of young bulls). The celebrated Cadaval animals, being raised for the Spanish market, were not large or tall, or the matador would have found great difficulty in placing the fatal thrust in the spine.

One day, a world-renowned foreign professor of zoology and husbandry, who was on a visit to the Cadaval estate, remarked to the Dowager Duchess that her bulls, though fine and fierce, were far too small. "Too much inbreeding," the professor said. "I would advise some crossing with specimens imported from France." His advice was followed, but the outcome was not very satisfactory. The bulls became obese and tame; in the arena they stared languidly at the matador, and then, more

often than not, ambled back to the stables So do great breeds of bulls fall into decay

June 23, 1946

Mass at the little church of Piedade The Cadavals were there too After Mass, I walked with King Umberto back to the villa. On the small esplanade in front of the church a number of beggars were congregated One of them approached the King, and suddenly opened his threadbare coat to reveal his naked chest, he had no vest and no shirt Umberto summoned his [illegible] icting him [illegible] Turconi,

Yes'

"But you only have three good shirts, sir"

The King replied, "Never mind, this man must have a shirt I will manage with two"

In the evening much of the conversation at dinner centred round certain disloyal generals The story was told of a well-known general who, a few days after the armistice of September 8, 1943, penned two letters, couched in identically enthusiastic terms, offering his unswerving loyalty, one he sent to His Majesty, and the other to Mussolini, who, since the foundation of his Republic in the North of Italy, had become the King's most implacable enemy

Once again I was impressed with His Majesty's magnanimity not a word of resentment escaped his lips

June 24, 1946

Today is the feast of St. John Towards evening the procession arrived at Bela Vista. There were about a hundred men and women, all on horseback The musicians were also on horseback, and their music had an Arab ring about it. They cheered the members of the Royal Family, and laid before them huge bunches of wild mountain flowers Soon after fireworks began cracking all over the place, and bonfires were seen around on the neighbouring hills

The royal children made a bonfire in the garden They jumped over the fire, and then insisted on every member of the household doing the same—including the Professor The flames were neither very high nor very fierce my performance was

monarchy as it was at one time in Italy, and as it still is in fortunate Great Britain Absolute power held by one person, be he king or dictator, always leads to disaster in the long run And, deep in my consciousness, I realize that my fervour for the monarchical regime has perhaps more to do with the person who sits on the throne than the throne itself Would I be so ardent a royalist, I wonder, if, instead of Umberto of Savoy, my country's king were a monarch of the Ruritanian or neo-Pharaonic type?

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invitation to an aristocratic table, or for the opportunity to be seen strutting around royalty"

She went on "Number two is, I'm sure, the scion of some small bourgeois family, who now endeavours to ape the ways and manners of lords and ladies In order to appear the seasoned, debonair courtier, he *tutois* the ladies in waiting and calls them by their first names Yesterday he started to *tutoyer* me, but I soon squashed his impudence"

Her Ladyship ended "Number three may, as they say, possess plenty of brains and more than his share of culture, but how insipid is his conversation, with never a spicy ingredient in it He praises everybody, we are all paragons of virtue His tongue never stings, it is always soporific."

June 29, 1946

Princess Maria Pia developed a bad cold some days ago, and I kept her confined to her room This morning I found her up, and she informed me she was going to Mass "It is my duty," she said

"It's not one's duty to go to church when one is ill," I replied, and added jokingly, "I will give you a medical certificate for the Ecclesiastic Authorities" Her Royal Highness looked at me severely "Your medical certificates are valueless in Heaven. I am better, and it is my duty to attend Mass" And she did

July 2, 1946

A very proud and spruce male member of the retinue is affected with scabies "Impossible!" he cried, aghast, when I told him "I take a bath every Sunday morning"

July 5, 1946

To lunch with a young attaché of the British Embassy, whom I have known for years He is enthusiastic in his praises of his Chief, but adds the remark, "He's as mad as a hatter!"

July 28, 1946

Last night, by invitation, I gave a lecture at the Plenary Meeting of the Congress on 'Urgent Surgical Syndromes', now taking place in Lisbon I am no surgeon, but in my long sojourn in the Tropics I had to do a bit of everything, including surgery, and in Ceylon I observed and described an extremely serious,

splendid, and was acclaimed by the children and the retinue with considerable applause

June 25, 1946

Today I went into Lisbon to try and change some Italian money A few days ago, no money changer in the city would accept it at any rate Today they have offered me one escudo for twenty eight lire (some years ago one Italian lira was worth four escudos) I was thankful I wanted to buy a few toys for the children On second thoughts, however, I decided not to, as the King and Queen, owing to the present financial situation, hardly ever give their children presents

In the evening, after dinner, an interesting conversation on church matters General approval is given to the present Pope's policy of increasing the number of foreign cardinals The Church is international and must be truly catholic Remarks are passed on the small number of monks and nuns one sees in Portuguese cities, in comparison with Italian cities This is the result of laws passed by the Republic in its first years of existence, forbidding members of religious orders to wear clerical garb in public Jesuits were expelled from Portugal in 1775 by Dom José I, whose Prime Minister was the celebrated Marquis of Pombal They were readmitted later, but they had to wear ordinary civilian clothing, which they do to this day Jesuits also wear ordinary clothing in Switzerland

June 26, 1946

Tea with Countess B de C —as maliciously amusing as ever That sharp tongue of hers spares no one, neither princes of the blood, nor the highest dignitaries of the Church, nor the members of her own family

At a certain point in the conversation she said "I know why Her Majesty likes to dine and lunch with us so much My daughter had dinner with her last night at Bela Vista, and there was literally nothing to eat!" (An outrageous exaggeration, of course The menu, as usual, was rather on the frugal side, but quite adequate)

On another ocassion, Countess B de C gave thumb nail sketches of three of King Umberto's entourage "Number one," she began, "is bright and amusing, but an appalling liar and a prodigious snob He will swallow a brace of toads to wangle an

ing that part of the success may have been due to luck, but part certainly was due to the preventive measures enforced by the High Command

Lustre was added to the occasion by the presence of the Chief of the Portuguese General Staff who, at the end of the lecture, made a short and complimentary speech, thanking me.

August 10, 1946

A famous middle-aged Italian opera-singer, a soprano, has come to call on Their Majesties She is rubicund, and her curves are prodigious It is interesting to hear that her most successful role is that of Violetta in 'Traviata', the frail young girl dying of consumption

August 19, 1946

Lunch with Mr and Mrs Sartorio in Lisbon. Count and Countess Grandi were among the guests Grandi has shaved off the black beard which he wore in London, and looks years younger in consequence. He recounted interesting details about the last meeting of the *Gran Consiglio del Fascismo* in 1943, and also of the Verona Trial He states that he came to Portugal at that time, not because he feared for his life, but by request of King Victor Emmanuel, with whom he had an interview a few days previous to the meeting of the *Gran Consiglio* Grandi advised the King to dismiss Mussolini, and to call in his place Marshal Caviglia, who was *persona grata* with the Allies According to Grandi, th- [illegible]

open secret negot [illegible]

was delayed day [illegible]

one of the assist [illegible]

Ambrosio, flew to Lisbon, where the armistice was arranged Grandi arrived in Lisbon four or five days after it had been signed He was furious with Castellano, Ambrosio, and Badoglio, but he admits that he could not have obtained better terms himself. (The Allies' invariable terms were unconditional surrender) He is still very bitter with Castellano, who wrote a book about these events

Grandi suddenly turned to me "You were working for a while in the Supreme Command as Chief Medical Consultant to the Forces on all fronts," he said "Did Castellano strike you as being endowed with exceptional mental powers?" I evaded

most acute pathological condition of the spermatic cord, which was often mistaken for strangulated hernia, while a few doctors considered it a peculiarly fatal venereal disease It begins suddenly with great pain, swelling, and high fever, and is always fatal unless an operation is performed within the first twenty four hours I called it endemic funiculitis

July 31, 1946

Dr William Feldman, of the Mayo Foundation, has given a most interesting talk at the Sao Jose Hospital in Lisbon on 'Streptomycin and Its Action on Experimental Tuberculosis' Dr and Mrs Feldman are an admirable couple he is the finest type I have met of the pure, dedicated scientist who cultivates science for its own sake, without worrying about financial or worldly success His wife is wrapped up in his work and shares his feelings She told me she hoped her young son, when grown up, would also be a research worker, interested solely in pure science

August 4, 1946

Queen Marie Jose's birthday Her Majesty is forty, and hardly looks thirty Her beauty is flawless, and her bearing truly that of a queen Elsewhere I have referred to her inspiring qualities of mind and heart

Great festivities at the Vila Bela Vista In the afternoon, the Countess of Paris arrived with her ten children she is quite young and slim The Countess of Barcelona also came, slightly more matronly, with her four children There was a total of eighteen lively youngsters romping about The fun and the noise were memorable

August 8, 1946

At the request of the Director General of the Portuguese Army Medical Services, I have today delivered a lecture at the Lisbon Military Hospital on 'Medical Aspects of Tropical Expeditions and Campaigns Carried out with White Troops' Medical history shows that, in every campaign where white troops were employed in the Tropics, the sickness and mortality among them was appalling, until the Ethiopian Campaign (1935–36), when the Italian troops enjoyed excellent health throughout the whole period of hostilities I concluded by say

Peter His Majesty suddenly turned to me and said, "Do you know, Castellani, that you are in the Pontifical Annuario?"

"As a bishop?" asked one of those present, not without a trace of sarcasm

"No, as an Academician," replied the King, "and you are entitled to be addressed as 'Excellency'"

He sent for the Annuario and showed it to us

Saturday, August 25, 1946

The conversation at dinner strayed to the Chinese and their pigtails When did they remove this appendage? I said, "In

In 1896 Sun Yat Sen was in London While walking one day not far from Harley Street he was kidnapped by some hirelings of the Chinese Embassy, and shut up in the Embassy until such time as he could be conveniently smuggled to China to have his head chopped off Sun Yat Sen was a great friend of James Cantlie's, whom he had known well in China years before when he was a student at the Medical School founded by Cantlie and Manson He managed to get hold of a scrap of paper, on which he wrote "To James Cantlie, Surgeon, Devonshire Street Please help me I am imprisoned in the Chinese Embassy" He pushed the paper through the grill and watched it flutter down the street. A passer-by picked it up and posted it to Cantlie, who immediately communicated the message to the Foreign Office The doctor was released Many years later, when the

slightly different, has been given by Cantlie's son, Lt.-General Sir Neil Cantlie, in the biography of his father

August 30, 1946

We talked about the visit to London, in

silvery galloons shone brightly on

a direct answer, as I knew the General only very slightly His colleagues considered him a mediocrity, but the judgment of one's colleagues in any profession has little tendency to excessive praise

With regard to the Verona Trial and the execution of Ciano, Marshal de Bono, and other prominent members of the Grand Council of Fascism, Grandi said that they all behaved in a most stoic manner Pareschi, when the guard came to fetch him, was found to be reading the classic account of the last hours of Socrates I knew Pareschi fairly well, he was Minister of Agriculture in Mussolini's Cabinet I treated him in Rome for a severe type of athlete's foot, I remember that he was a great believer in my fuchsin paint for this condition He was a nice, simple man, who insisted that he was no politician, but only a technician When Grandi asked him to add his signature to the motion he had drawn up, in favour of returning to the King the supreme command of the army, he acquiesced reluctantly, saying "I do this only to please you I dislike politics, agriculture is my only interest" The signature cost him his life

August 24, 1946

After dinner we all noted once again what a vast amount of general knowledge the King possesses, and how widely read he is The subject of the Albanian colonies in Sicily cropped up Very few people know of their existence, but I happened to, owing to an experience I had had fifteen years previously in New Orleans, where, in addition to the professorship at Tulane University, I had a ward in the General Charity Hospital A visiting physician one day asked me to go to his ward and act as interpreter to an Italian patient The patient turned out to be a Sicilian, but I could not understand a word he said He was not speaking Italian, nor the Sicilian dialect, but a peculiar lingo of his own, which I later discovered was Albanian He was a Sicilian belonging to one of these colonies

It came as a surprise when His Majesty informed us that their clergy, though belonging to the Church of Rome, are allowed to marry, but a married priest can never become a bishop Later a discussion arose about the number of popes and the length of their reigns The King mentioned the approximate number (over 250), and said that St Peter, Pius IX, and Leo XIII were the three who had reigned longest, the last two longer than

Director is Professor Gentile, the celebrated surgeon. Close to the Institute is a school for nurses, and I was much impressed by its most up-to-date methods of teaching In one of the class rooms there is a bed, and lying on the bed, modestly covered by a sheet, is a life size rubber dummy, a replica of the female body, so perfect that enemata and irrigations can be performed on it. Student nurses are wisely made to practise on this dummy for a month before being allowed to try their prowess on real patients

How the great are in the hands of those who surround them! Immediately after the visit, which lasted over two hours, the King desired to remain in town for the afternoon, and have a simple luncheon at a Lisbon restaurant. One of the members of the retinue said it was very late, and respectfully hinted to His Majesty that at Piedade people might become concerned He told me afterwards that stopping in town would have spoilt our afternoon, by which he meant *his* afternoon, or, to be more exact, his siesta.

September 17, 1946

I have written to His Majesty King George of Greece, con gratulating him on the result of the Greek plebiscite The Greeks have shown more sense than the Italians.

I was the King s doctor in London for many years He was always very kind to me, he is so natural and human Quite a number of times he honoured our small place in Surrey with his presence I remember once inviting Lady —— on the day he was coming ' How thoughtful, he said, smiling when I told him Everyone knew that she was a great friend—platonic—of his

Though the bearer of a most noble name, the lady was born the daughter of a station master An earl s son fell passionately in love with her, and they became engaged much against the will of the boy s aristocratic family Angrily the earl telegraphed the girl s father "This marriage cannot take place. The boy is my only son and heir and I am the Earl of —— A telegraphic reply came back ' I see no reason why this marriage should not take place My daughter is my only child and heir, and I am the station master of ——' (a tiny village in Scotland)

the sleeves of his tunic they had been sewn on that very morning

His Majesty talked of Buckingham Palace of those days, and rather agreed with what was said then by other royal guests It was far from comfortable the rooms had no bathrooms attached, instead, there was one communal bathroom at the end of a long corridor

His Majesty had a slight cold, and I suggested that he should take a glass of port, it is my standard prescription to counteract the effects of the damp climate of Piedade Nobody, however, poured out the wine for him, so he took the bottle and filled a small glass for himself (I was not near enough to do so) General Graziani exclaimed "*Chi fa per se, fa per tre, ed è servito come un re*"

I asked His Majesty if it were true that kings are always well served He smiled On many occasions he has been served pretty badly by his entourage and ministers, and so has the Queen One of her gentlemen in waiting at the Quirinal was the limit of asininity One day, shortly before the plebiscite, the President of the Senate telephoned the Palace, and after many attempts succeeded in getting in touch with the gentleman in question The following conversation took place

The gentleman, in an offhand voice "Who are you?"

"I am the president of the Senate"

"What do you want?"

"I wish to have an audience of the Queen any day convenient to Her Majesty"

The gentleman, in even more bored tones "The Queen grants audiences only to a select few However, I will put you on the waiting list"

The same gentleman, after the armistice of September 8, 1943 became a Mussolinian Republican Later, when he saw the end of Mussolini's Republic approaching, his interest in republican affairs rapidly waned and he became again a firm believer in the monarchical institution of government He is now an ardent monarchist

September 16, 1946

His Majesty, accompanied by me and some other members of his entourage, visited the Lisbon Cancer Institute It is a perfectly organized institution, and a most imposing edifice Its

Director is Professor Gentile, the celebrated surgeon Close to the Institute is a school for nurses, and I was much impressed by its most up to date methods of teaching In one of the class-rooms there is a bed, and lying on the bed, modestly covered by a sheet, is a life size rubber dummy, a replica of the female body, so perfect that enemata and irrigations can be performed on it Student nurses are wisely made to practise on this dummy for a month before being allowed to try their prowess on real patients

How the great are in the hands of those who surround them! Immediately after the visit, which lasted over two hours, the King desired to remain in town for the afternoon, and have a simple luncheon at a Lisbon restaurant One of the members of the retinue said it was very late, and respectfully hinted to His Majesty that at Piedade people might become concerned He told me afterwards that stopping in town would have spoilt our afternoon, by which he meant *his* afternoon, or, to be more exact, his siesta

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CHAPTER XIII

SWITZERLAND, ITALY, SPAIN, MOROCCO

IN SEPTEMBER, 1946, Queen Marie Jose seemed to be growing weary of the bucolic life of Piedade, without any artistic or literary distraction of note she welcomed a letter from her brother, Leopold, King of the Belgians, asking her to pay him a visit at his house near Geneva. I was selected to accompany Her Majesty, to the anxious concern of the rest of the entourage, whose confidence in the Queen's practical sense was not unbounded, and in mine positively nil. ('He lives in the clouds, he thinks only of microbes and tropical diseases Between the two of them they will never reach Geneva, they will board the wrong 'plane and land in Tunis, they will lose their luggage. ')

However, the right 'plane was boarded—a Swiss aeroplane which, after five hours' smooth flying, deposited us safely in Geneva. At the aerodrome a very young looking man, fair and lean—King Leopold himself—came forward and embraced the Queen He looked no more than thirty five, although according to the Almanac de Gotha he was nearer fifty than forty Brother and sister proceeded to the 'Reposoir', the King's villa while I followed in another car

In my diary for September 1946 I read "The 'Reposoir' is an attractive villa in the midst of lovely lawns and gardens, and the interior is also pleasing King Leopold introduced me to his family—and one sensed at once how closely knit there are, and how fond of each other The King's wife, Princess Lilian de Réthy, is a beautiful woman of twenty-eight, with dark hair and luminous eyes a matt white complexion, and a willowy, sinuous figure

"Baudouin is a tall boy of sixteen, rather thin, bespectacled, with a nice, serious expression. He has quiet, delightful manners On entering the dining room he insisted on my going first. He adores his father, and constantly gazes at him with respect and admiration. His brother, Prince Albert, is an intelligent looking boy of twelve, rather shy, and there is a most attractive blonde

September 18, 1946

A friend at the British Embassy took me to Lisbon to see a film called 'Rommel I could see immediately that the film had not been shot in the African Desert, but in some artificial desert in Hollywood, the dunes were all the same height and shape and the sand appeared beautifully rolled and furrowed They made Rommel a ridiculous figure, with a clean shaven, vapid face, and wearing a long white tunic In Africa I never saw him, or any other German officer, wearing a white uniform At a certain point they made him exclaim disparagingly "In future, the expression 'they died like flies' will cease to be used, instead it will be 'they died like those stupid Britishers at Tobruk'" I am quite sure this phrase was never uttered by Rommel he was a fine, brave soldier, who had a great respect for the British

I knew him fairly well I was first introduced to him in Tripoli the day he arrived Then I occasionally saw him at Italian Headquarters at Cirene, and once at his own Head quarters in the desert I arrived at lunch time The meal consisted of thick soup, which was rather good, a piece of cheese, black bread, and a cup of black coffee No wonder the officers in his entourage were delighted when they were invited to Italian Headquarters, where the repasts were certainly not lucullan, but the food was always ample and well cooked

numbers, as the Prince was *Assistente al Soglio*, the highest non-clerical position at the Pontifical Court, which is held here ditarily by two ancient Roman families, the Colonnas and the Orsinis

I have a pleasant recollection of a conversation I had with a young looking, pink-complexioned, ever smiling Prince of the Church—Cardinal Bernard Griffin, Archbishop of Westminster [illegible]

precious boy of the family He was destined to die at a comparatively early age

Prince Colonna's disease was cancer of the lung, but, his general health being fairly satisfactory, the Princess had hoped that the diagnosis might be mistaken He was living his normal life, and came down to meals

On one occasion a very high ecclesiastical dignitary was a guest at lunch, and recounted with minute particulars a custom common among nursing mothers of the lower Roman classes When [illegible] their b[illegible] richne[illegible] excha[illegible] with the greater avidity

The story upset Marc'Antonio, and he started coughing "Something has gone the wrong way," he exclaimed, and left the room trying to hide his annoyance He returned a few minutes later That night he retired to bed at his customary hour of ten At 2 a.m I was called He was complaining of a piercing pain in the chest and h[illegible] to 104. I[illegible] ing I pu[illegible] fuse crep[illegible] to be heard—minute inspiratory *rales* with a sound which has been compared to the fine crackling elicited by rubbing hairs together with the fingers Lobar pneumonia Penicillin, which was then still something of a novelty in Italy, saved him.

While he was [illegible] talk on the ca[illegible] organism *Pneu*[illegible] believe in mic[illegible]

girl who looks fifteen but is actually nineteen—Josephine Charlotte"

The mother of these three children, Baudouin, Albert, and Josephine, was Leopold's first wife, the Swedish born Queen Astrid, who died so tragically in a car accident her beauty was a by word, and her moral qualities equalled her beauty

I was often asked to dinner at the 'Reposoir', *en famille*, and I enjoyed the delightful hospitality Princess de Rethy s conversation was sparkling and amusing After dinner there were *jeux de société* and charades I did not excel in either All my life I have been a miserable failure at such games, or anything approaching so called 'intelligence tests'

More than once I had long conversations with King Leopold in his study He showed me his remarkable scientific reports upon his explorations in little known regions of the Dutch East Indies Twice a week a famous professor of mathematics called at the 'Reposoir' from Geneva University, and the King and the Professor would remain closeted together for hours on end, discussing the most abstruse mathematical problems

The King often talked to me quite freely about politics I did not form the impression that his ministers stood very high in his esteem

On October 14 a telegram arrived from King Umberto Princess Isabel Colonna of Rome had implored him to send me to Rome to attend her husband, Prince Marc'Antonio, who was seriously ill

Leaving Geneva the same night by train, I arrived in Rome the following day, and from the station drove straight to the Colonna Palace The Princess insisted on my staying in the Palace and having my meals with them I observed that there were two dining rooms adjoining each other—an inner one for winter use with a huge, ornate, open marble fireplace, and an outer one for the summer and autumn (which is hot in Rome) opening on to the garden in a niche in one of its walls a little gem of a fountain murmured continuously, cooling the air

The Colonna Palace is the most splendid of the private palaces of Rome, on the ground floor immense, magnificent *salons* open out one into the other, their floors paved with rare marbles, and on the first floor is an art gallery of which there is no equal in the world

At the Palace I met cardinals and Vatican dignitaries in

numbers, as the Prince was *Assistente al Soglio*, the highest non-clerical position at the Pontifical Court, which is held hereditarily by two ancient Roman families, the Colonnas and the Orsinis

I have a pleasant recollection of a conversation I had with a young looking, pink-complexioned, ever-smiling Prince of the Church—Cardinal Bernard Griffin, Archbishop of Westminster He was the youngest of the cardinals, and was always in a happy and mirthful mood, it is said that he was affectionately referred to by the Pope as his *Beniamino*, which in Italian means the precious boy of the family He was destined to die at a comparatively early age

Prince Colonna's disease was cancer of the lung, but, his general health being fairly satisfactory, the Princess had hoped that the diagnosis might be mistaken He was living his normal life, and came down to meals

On one occasion a very high ecclesiastical dignitary was a guest at lunch, and recounted with minute particulars a custom common among nursing mothers of the lower Roman classes When two such women meet in the street with their babes at their breasts, they immediately start boasting about the quality, richness, and abundance of their milk, and all of a sudden will exchange babies for a moment, to see which breast is sucked with the greater avidity

The story upset Marc'Antonio, and he started coughing "Something has gone the wrong way," he exclaimed, and left the room trying to hide his annoyance He returned a few minutes later That night he retired to bed at his customary hour of ten At 2 a.m I was called He was complaining of a piercing pain in the chest, and his temperature had shot up to 104 His pulse was galloping, and his skin felt dry and burning I put my ear to the back of his chest on the right side profuse crepitations were to be heard—minute inspiratory *râles* with a sound which has been compared to the fine crackling elicited by rubbing hairs together with the fingers Lobar pneumonia Penicillin, which was then still something of a novelty in Italy, saved him

While he was recuperating, Marc'Antonio and I had a long talk on the cause of
organism *Pneumocc*
believe in microbe

story told by the Monsignor "It upset me," he said "I coughed, and something snapped inside my chest, giving me pneumonia A prelate in his position should not recount such vulgar stories"

On the second day, when he was at his worst, Marc'Antonio had shouted in his delirium "Those accursed Germans—I hate them! They have shelled Rome and my house I never want to see a German again in my life" And a few minutes later "The Italian Foreign Office people are a bunch of congenital imbeciles" "*In delirio veritas?*" murmured my assistant

Marc'Antonio got over his pneumonia, but of course there was no hope of a cure for his cancer, and after three weeks I returned to Geneva

* * *

While in Rome, I had the honour of a private audience of His Holiness Pius XII I transcribe from my diary

"Private audience of His Holiness the Pope at Castel Gandolfo at 10 30 a m My old assistant, Urso, who is *Cavaliere di Cappa e Spada,* took me there in his car A pleasant half-hour drive from Rome, and a lovely day About a mile before reaching the castle, a long thin line of *carabinieri* began, one every twenty or thirty yards along the road At the entrance of the Palace stood a group of Swiss Guards in their peculiar, somewhat harlequin-like uniforms, designed, it is said, by Raphael centuries ago After inspection of my special invitation card, I was taken upstairs in the lift On the landing a high dignitary of the Papal Court, dressed in purple robes, greeted me and asked me to take a seat in a nearby *salon* The room was very cold I put my hand on the radiator and found it icy Seeing me do this, one of the servants remarked 'When we ask permission to heat the Palace the Pope always replies that he cannot have heating when other people lack it' In those days coal was very scanty and the poor could not obtain it

"A few minutes later I heard an electric bell ringing someone had left the audience chamber and it was my turn I was conducted there by the Monsignor

"The Pope, an ascetic figure in a white cassock, was sitting in a large armchair in front of a table on which were a number of papers tidily arranged On his shoulders I noticed a small,

snow white, knitted shawl which I thought was surely the workmanship of some nun I knelt and kissed his ring, and he said graciously 'I am very glad to see you' We talked about the royal family, and especially the royal children He remembered [illegible]

sent.' His references to the King and Queen were extremely courteous He graciously accepted a copy of my book on African Diseases and a reprint of my paper on the 'Nervous and Other Reactions Shown by Individuals Exposed to Bombardment and Enemy Fire' His long fingered right hand made a movement, and I thought the audience was over and I got up But His Holiness said *'Sedati e non vada via ancora'* [Sit down and don't go yet.] So I remained another few minutes talking with him, then he gave me his blessing and I took my departure

'My impression of His Holiness? A saintly man and a great diplomat—two qualities which seldom go together Physically, he looked younger and better than he had a couple of years earlier, and I told him so He replied that for five years after he ascended St. Peter's throne he was shut up in the Vatican, summer and winter, and felt fatigued and unwell He then decided to pass the summer months and part of the autumn at Castel Gandolfo, and this had done him a lot of good

'Castel Gandolfo is an imposing palace containing a number of *sale*, each of which corresponds to an equivalent *sala* (large room) in the Vatican but is much smaller and more simply decorated"

* * *

On my return to Geneva from Rome, King Leopold and the Princess de Rethy once more bestowed their gracious hospitality on me, and I often dined at the 'Reposoir' On one occasion a tall, fair haired northern prince was present he looked like a Viking demi god and was bubbling with life Everyone was in high spirits, and the prince greatly augmented the general hilarity by recounting a story concerning his grandfather—the aged reigning monarch—and his father For years both of them suffered from unexpected, abrupt abdominal stimuli requiring a precipitous disappearance at the most inopportune moments

Once they were at an open air commemorative function in a far away country district Suddenly, and simultaneously—while one of the rural notables was finishing his prolix oration—they felt the well known urge Together they rose from their chairs, bounced off the bedecked platform and started running towards a solitary house which they espied in the distance To the enthusiastic cheers of the crowd they sped, bent double, with one hand clutching the stomach and the other in the air waving fervent acknowledgment whilst hoping against hope to reach the house in time

In Switzerland at that time ridiculous whispers were rife that Queen Marie José was plotting for the restoration of the monarchy in Italy The Swiss authorities were unduly concerned and through a diplomatic friend I was tactfully exhorted to drop a respectful hint to Her Majesty as to the necessity of extreme caution in granting audiences to visitors from Italy The rumour apparently arose from visits paid to Her Majesty by a high official of the Italian Red Cross, in the working of which institution the Queen was still deeply interested, since she had been head of the Red Cross Nursing Service—very successfully—for years Her visitor was a melancholy looking homunculus of uncertain age, whose appearance certainly did not suggest the fiery leader of a restoration The rumour soon died down, to be supplanted by another Her Majesty was holding the most advanced political opinions, favouring socialism and communism This, of course, was also quite untrue, although the Queen's natural tendency is towards liberalism and democracy, which is a traditional attitude in the Houses of Savoy and Belgium

Returning to Portugal in December, I found great changes Vila Bela Vista at Piedade had been vacated and two houses taken in Cascais, the picturesque fishing village of the Costa do Sol, near the fashionable resort of Estoril One of the houses—the rather imposing Beluarte , overlooking the small harbour—was to be the royal residence, the other, quite a large house nearby, was reserved for the retinue Eventually the Royal Family moved to 'Villa Italia', a villa just outside Cascais, not fifty yards from a wild strip of coast where the mighty waves of the Atlantic crash on to the cyclopean rocks surrounding the *Boca do Inferno*—the Mouth of Hell

An interesting event was Queen *Elizabeth of Belgium's* visit to her daughter and son in law She is a most remarkable royal lady

who, at that time, was seventy but looked no older than fifty-five. She is *petite* and there is nothing striking about her appearance, and in a crowd, as a courtier once remarked, she might be mistaken for a neatly dressed, self-composed school teacher But the moment she starts talking a transformation comes over her, and her magnetic personality manifests itself—the personality that has fired to greatness the imagination of writers and famous men of art and science In the violin case of a celebrated musician whom I know well there is pinned a photograph of the Queen, and before playing he always glances at it. It gives him, he says, the inspiration that leads to supreme effort and great achievement.

After the Christmas and New Year festivities, Queen Elizabeth, noticing symptoms of spreading tedium in the Cascais court, suggested a trip to the Moorish cities of Spain The idea roused enthusiasm Within a few days the party, consisting of Queen Marie Jose, Queen Elizabeth and her inseparable, most efficient maid secretary, Marguerite, the Marquis and Marquise de la Boyere, the Belgian Minister Baron Van der Elst, and myself, set forth on the venture in four cars.

It was a delightful tour, comprising Granada, Cordoba, Malaga, and Seville.

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pe ..., according to poetical tradition, to commemorate the red flare of the torches by whose light the construction was carried out night after night for many years Perhaps it originated from the name of the founder, Mahomet Ibn Al Ahmar The building of the Alhambra lasted over a century, from 1248 to 1354

While we were staying at the famous Alfonso XIII Hotel de Seville, a telephone message came through from San Luca da Barrameda The voice of the Infante Alfonso of Bourbon and Orleans was heard would the two Queens honour San Luca with a visit? The following day the Infante and the Infanta came to Seville to pay their personal respects The Infante, after talking to the Queens, suddenly caught sight of me and came forward with outstretched arms "At last, my dear friend," he exclaimed, "we meet again after so many years and so many

vicissitudes " I had attended the Infante for long periods in London during the early 'twenties, and a friendship had sprung up between us which time and distance could never dim Five memorable days of enjoyment and peace were spent at San Luca, the royal and non royal members of the party loved the *palacio*—a large, rambling place with a variety of architecture, surrounded by spacious gardens, in one of which a magnificent swimming pool had been constructed

The Infante Alfonso is a wonder Although over sixty, his appearance is that of a man twenty years younger He dives into the pool with the vigour of a young man and stays under the water for ages, then comes to the surface, swimming with a powerful over arm stroke Though outwardly full of fun he is of a serious disposition, and it is a real pleasure to listen to him talking with knowledge and wisdom on the most diverse subjects Someone at table mentioned a rumour that a large number of Spanish royalists wanted him on the throne "That is foolish talk," he smiled "The fundamental principle of the monarchical system is heredity, and when this principle is not applied in its entirety things go badly Look at the history of Poland, where the kings were elected, there was disaster after disaster—centuries of disaster " The Infante is absolutely loyal to Don Juan

* * *

In March 1947 Queen Marie Jose, while recovering from a minor surgical operation, was suddenly struck by retinal haemorrhage within a few seconds half her eyesight was gone The famous professor of ophthalmology at Lisbon University, Andrade, was called immediately, and twenty-four hours later the even more celebrated Dr Aruga arrived by 'plane from Barcelona Between the two luminaries a few mild passages at-arms occurred, as is customary among the top men in every profession, but they agreed about the diagnosis and the treatment

Weeks of tedious existence in a darkened room followed for the august patient Her Majesty was denied her greatest pleasure, reading, and not a single cigarette was permitted Her fortitude was to be admired—never a word or gesture of impatience In May her eyesight approached normal, and the Queen left the hospital for Cascais One morning, a short time later, she announced that she needed a change ' I have had an

invitation to visit some cousins of mine who live in Morocco," she said "I am determined to go, and as people fuss so much over my health, you will escort me"

"Morocco," I gasped, "for someone convalescing from a grave eye affliction! Think of the blinding glare of the desert sand shimmering in the pitiless tropical sun." I was visualizing Morocco as I had known it thirty years ago

A few days later I went to the French Embassy to get visas for French Morocco, and took the opportunity to ask a few anxious questions about the country Since the time of Marshal Lyautey, I was informed, Northern Morocco had become a green garden all the year round, a statement I was soon to find correct, notwithstanding my misgivings.

On May 18, 1947, the Queen left Cascais for Algeciras There we embarked on the small steamer plying daily to Ceuta, in the Spanish part of Morocco, but administratively considered an integral part of the Metropolis During the crossing the Captain invited Her Majesty to remain on the bridge From this point of vantage we could see, on approaching Ceuta, a tall, exceedingly good looking and well-dressed woman with a magnificent bouquet in her hands, surrounded by a circle of elegant ladies and officers. She was the High Commissioner's wife, Señora Varela.

As soon as the gangway was in position an elegant gentleman [illegible] Travesedo y Silvela, Ministro Plenipotenciario, Jefe de Protocol de S E El Alto Comissario After presenting the greetings of the High Commissioner, he escorted the Queen ashore, where Madame Varela was waiting

In a long column of cars we proceeded to the High Commissioner's palace at Ceuta, and there spent three delightful days The only minute fly in the ointment was the hours of meals—lunch at three and dinner at eleven. Interesting guests were always present, and the *cuisine* was excellent.

General Varela I liked immediately—he had the open expression of an honest, straightforward man. We had many conversations while walking in the garden after meals He had started his military career as a private, was promoted to corporal, and soon after became a sergeant. He passed the entrance

examination for the Military Academy, and two years later became an officer, he then took part in the Moroccan War, where his courage became legendary He was promoted by King Alfonso XIII from second lieutenant to lieutenant, and then, when only twenty five, to captain Twice during the war he received the highest decoration for bravery on the field, the Gran Laureada de San Fernando, corresponding to the Victoria Cross *He is the only man in the Spanish Army on whom this* decoration has been bestowed a second time

General Varela told me that he was Minister for War for a long period during the Second World War, and was always opposed to Spain entering the war, as she was not prepared

One day *the following dialogue* took place between us

Q If Spain had entered the war on the side of Germany and Italy, would it have made a great difference?

A It would have prolonged the war, but the ultimate result would have been the same

Q Would the Spanish Army have succeeded in taking Gibraltar?

A Certainly, with the aid of the German Air Force and heavy artillery Several Spanish infantry divisions had been specially trained for an attack on the Rock, using many artificial obstacles similar to those they would have met in an assault on Gibraltar

General Varela intensely disliked Serrano, the Minister for Foreign Affairs, who was all for declaring war on the Allies "He was a fool," said Varela, "and a fop as well He aped Ciano in his clothes and the way he did his hair" Ciano was always smartly dressed, but he never struck me as being a leader *of masculine fashion—certainly not of the Bond Street type* His coiffure consisted of thick hair brushed back and plastered down with a soft semi liquid pomade which, it was said, he imported direct from China it had a similar formula to the 'Gloss preferred by kings for over a hundred years'—or Macassar oil, now no longer *obtainable*

In one of his conversations with me, Varela said "Mussolini was a great man and Hitler a pigmy in comparison His only mistake—a fatal one—was to enter the war, and during the war it was suicidal of him to attack Greece He always behaved very *generously towards Spain—much more so than Hitler* I have seen practically every letter sent by Mussolini to the Caudillo,

and all reveal affection and generosity towards our country " Varela continued. "Mussolini particularly requested that there should be no question of money between Spain and Italy, and expressly stated that if Spain could not pay for the war material on delivery, Italy would wait indefinitely."

On another occasion Varela told me that, after the liberation of Barcelona, he personally visited the offices, examination-rooms, and cells of the Russian Cheka, and saw the instruments of torture used by the Chinese executioners sent by the Russian [illegible] inflicted on the prisoners [illegible] ere all for him True [illegible]

try districts "

He expressed his opinion that the restoration of the monarchy in Italy could only be achieved by a *coup d'etat* He firmly believed that the majority of Italians were royalists "But it is the men at the top who count," he declared "They are republicans, and they will manipulate the elections to their own ends " He added "Have you no general with personality and prestige who can start another march on Rome? What about Badoglio?" He did not realize, perhaps, that *pronunciamentos* are not in the tradition of the Italian Army.

Varela talked quite freely about the internal political situation of Spain. He was absolutely loyal to Franco—it was said at the time that the Caudillo had designated him as his successor—but I sensed in him the hope that in the not too distant future King Alfonso's son, Don Juan, would ascend the throne He repeatedly expressed admiration for the young prince· he liked his honesty and straightforwardness As for Madame Varela, she was violently royalist—like all good Basques, she used to say.

On June 2 we left Ceuta for a prolonged tour of French Morocco, visiting Rabat, Casablanca, Marrakesh, and other places. Rabat, the capital, [illegible]
bu [illegible]
di [illegible]
of [illegible]
H

anywhere in the town I went to an *épicier*—no soap, I tried a chemist with the same result I then entered a much advertised *Salon de Beauté pour Dames*, only to be told that soap was not an item of their beauty treatment A young lady of the establishment, taking pity on me, suggested my trying the municipal market three miles away on the other side of the town There, after much searching, an old dried-up square of green soap, such as is used for scrubbing dirty floors, was discovered *Faute de mieux* I bought it

As a medical man I could not help pondering how it was that, notwithstanding the absence of bathrooms and the extreme scarcity of soap, all the European women looked so *soignée*, and one never came across a malodorous person I concluded that this happy state of affairs was largely due to the daily sunbath which everyone took on the screened terraces of their houses—and there is no better cleanser, deodoriser, or disinfectant than the sun An important part was doubtless played also by the sedulous use of the *bidet* by both sexes in French countries

French colonials and officials, business and professional men, and the small *élite* of aristocrats who had exchanged Europe for Africa, struck me as keen, intelligent, and hardworking As is the way with all colonies, the proportion of eccentrics was higher than in the mother country, and better tolerated, their eccentricities provoking good humoured mirth rather than censure I met a European family the feminine members of which were firm advocates of the natural life, believing in the tenets of the School of Salerno and putting its teachings into practice After lunch and dinner they would recline on the low divans and talk animatedly to their guests, the while making no effort whatever to restrain fermentitious phenomena, the incarceration of which might produce discomfort The head of the family, who was not a follower of the School, once murmured with a sigh "*Quelle famille nature que j'ai l'honneur d'avoir!*"

Casablanca reminded me of Marseilles, the streets crowded with people of all nationalities and races—everyone busy There were signs everywhere of a post-war commercial and industrial revival, even a Coca Cola factory had been built and was flourishing, the beverage being advertised as the best quencher of tropical thirst Casablanca boasts a famous restaurant, *Le Roi de la Bière*, which public opinion believes to rival the *Tour d'Argent* in Paris Although an ignoramus in the culinary field, I

must admit that the food there was delicious I hope the restaurant is still in existence for the delight of local and international gourmets

Marrakesh I liked immensely—perhaps influenced by the comfort of the Marahouna Hotel, a magnificent hostelry, and the only place in Morocco where plenty of bathrooms were to be found A memorable event was a dinner given in honour of the Queen by the Pasha of Marrakesh who held sway over the city and large tracts of land around it, with a population of about 200 000 The Pasha was old and feeble, and his two sons acted as hosts At the dinner, at which several Mohammedan notabilities and European visitors were present, I had a long conversation with the younger son—a young man of keen intelligence, aged about twenty three—who told me that he had studied law at the Marrakesh Mohammedan University He had become a judge, and was allowed to give sentences of up to two years imprisonment. That night he and his brother were dressed in the traditional burnous, but the elder brother often wore European clothes and was a very keen golfer

The Pasha s palace is in the centre of the indigenous quarter of the city, it has no very imposing entrance, but the interior is magnificent, with wonderful tapestries and carpets, and priceless old Moroccan furniture Notwithstanding its situation in the midst of the most popular quarter of the city, the palace has a spacious garden with ornamental trees, cypresses predominating In the dark of the tropical night the softly illuminated garden was a wonderful sight. The cypresses stood dark, tall and slender, against a cloudless sky studded with myriads of twinkling stars, and in that setting aroused no sensation of melancholy Pointing to them, the Pasha's younger son said I can t understand why you Europeans make use of such beautiful trees only to adorn cemeteries'

The dinner was a great success We sat cross-legged on a floor covered with thick exotic rugs, around a platform like table only a few inches high Just before the meal started a young female slave her wrists and ankles heavy with silver bangles, came round with a jug and basin and poured a thin stream of water over our hands, a performance which was repeated at the end of the meal The *pièce de résistance* was a monumental pie with a very thick crust. The two hosts vied with each other in thrusting the fingers of their right hands through the

crust and choosing tender morsels which were ceremoniously offered first to the Queen and then to the other guests. In the complete absence of knives and forks we had to follow their example. Technical difficulties and self-consciousness were rapidly overcome, and we dug and tunnelled into the depths of the pie in search of the most delicate tit-bits.

As an aside, I may say that only the fingers of the right hand must be used—never the left hand, which, according to Mohammedan custom, is the one employed for the daily intimate ablutions. As to the drinks, there was plenty of pure water served out of cool earthenware jugs. However, about halfway through the lengthy meal a gigantic negro servant in flowing white robes entered the room with two enormous bottles of champagne. It was an interesting study to watch the sudden transformation from gloom to elation on the faces of the European guests. The two hosts did not touch a drop.

Soon after we arrived at Marrakesh, Her Majesty made a trip to the Atlas Mountains, accompanied by her relatives, while I remained behind 'walking' the excellent hospitals of the place and lecturing 'by request' to the doctors. On her return from the Atlas Mountains the Queen, always interested in medicine and science, expressed a desire to see the hospitals, and a visit to the Marrakesh General Hospital was arranged. At the end of the visit the Queen turned to the chief doctor, uttering the customary congratulations on the running of the institution, and then added: "I hear there is an annexe for lepers: I should like to see it." Doctors and nurses alike were horrified, but the Queen had her way, and we were driven to the annexe, which was about two miles distant.

Sitting on a mat on the verandah of a small ward was a young leper woman of about eighteen or nineteen, fondling on her knees an eighteen-months-old child, already a leper. "*La maternité!*" exclaimed one of the doctors as he pointed them out to the Queen. A few yards away stood a sour-looking man of about thirty, his face—a monstrous agglomeration of swellings and nodules—bearing the horrifying 'leonine' appearance of the advanced leper. He was the young woman's husband, and the father of the baby. Her Majesty talked to the young mother very sweetly in French, which the girl understood, and [illegible] ing, to the dismay of all present, caressed to rival the *Tour* shook hands first with the mother and the the culinary field, I

man's face suddenly lost its moroseness, and for a few seconds a gleam of light illuminated the deformed features of the small crowd of lepers that had gathered on the verandah We were all deeply touched

In the eleventh, twelfth, and thirteenth centuries Marrakesh was a famous medical centre, but most of the luminaries were born in Spain The famous Avenzoar, who flourished at the beginning of the twelfth century, was born and bred in Andalusia, and from there moved to Marrakesh in the year 524 of the Mohammedan *aegida* At Marrakesh he was imprisoned for ten years—we do not know for what reason, but it was probably political—but he was allowed to see patients and teach students In one of his books he wrote at length on the diagnosis of leprosy, and how to distinguish the discoloured leprotic patches from the white patches of 'bahea' (leucoderma), in the former, pricking with a needle did not produce pain, in the latter it did He recounts that many doctors, out of the goodness of their hearts, would tell the authorities that a certain patient was suffering from 'bahea' when his complaint was in reality leprosy, to avoid his being forcibly removed from his wife and family into permanent segregation

At the end of our tour we spent three most pleasant days with General and Señora Varela before embarking on the same steamer which had brought us to Africa

At Algeciras the Infante Ataulfo and Don Ignacio de Muguiro were there to attend the Queen, and we proceeded to the Palacio de San Luca—as ever, a haven of peace and hospitality—where we spent over a week.

Among the guests at the Palacio was the celebrated Director of the Madrid Conservatoire He looked twenty eight but was actually forty-seven—very charming, very much *à son aise dans le grand monde*, and a wonderful pianist capable of interpreting magnificently the most varied types of music. He would play ultra modern, exceedingly noisy symphonic compositions, hammering and thumping the keys like a raving lunatic, he would then play majestically extracts from 'Tannhaüser', *con amore* Puccini's 'Manon Lescaut, or the 'Barber of Seville' with lively verve Sometimes he would condescend to play the 'Blue Danube' and other Viennese waltzes, and play them d[illegible]
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CHAPTER XIV

PORTUGAL

SINCE 1946 PORTUGAL has been my permanent home, and I have grown to love this ancient country It is a land of peace and contentment—so far as we mortals are capable of being contented—in a stormy European scene of unrest, political strife, and hatred I know of only one other country enjoying the same happy situation Switzerland

It is often thought that Portugal is backward, but during the last three decades she has made great strides along the road to progress, and today is second to no other country In science, literature and the arts, in industry and trade, the Portuguese names shine, and in social legislation she has made steady progress

And what of the architect of this land of peace and contentment which is Portugal today? A simple, honest, hard working, serious, unassuming man, called Antonio de Oliveira Salazar, one-time Professor at Coimbra University

The first time I had the honour of meeting Salazar was in June 1946, when he called on King Umberto at Piedade I remember noticing his car—small and unpretentious, and so different from the gleaming colossi seen everywhere on Portuguese roads at that time, when the exportation of wolfram to the belligerent countries had bred a multitude of *nouveaux riches*

The royal interview over, I was presented to Salazar and we had a brief conversation. What a contrast to the Italian Duce of latter years, to whom he has been likened by certain journalists Here are no histrionics, no Caesarean mask, no jutting chin or bulging eyes, or jerky movements of arms and hands in new fangled salutes Just a quiet man, with quiet manners, and an uncommonly intellectual face Some Leftist scribes insist on calling him a dictator What an absurd appellation! He is quite willing to relinquish his position at any time the country desires it, and resume his professorial Chair at Coimbra He actually once did so, but the people became scared and forced him back to the Prime Minister's office Salazar is no dictator,

chairs and sent them jiving and swaying about the room (and this long before rock 'n roll)

On July 10 the Governor of Gibraltar gave a dinner in honour of the Queen, who was escorted by the Infante Ataulfo, Don Ignacio de Muguiro, and myself It was a memorable event, and reminded me of the old Ceylon days of thirty years before Everything was typical of an English colony His Excellency the Governor, tall, lean, courteous but rather reserved, Her Excellency the Governor's wife, very gracious, the Chief Justice, the Admiral Commanding, the General, the various officials in their proper order of precedence, the smart A D C s, the perfect service, and the excellent food and wine I was sitting next to the Chief Justice's wife, very intelligent and attractive, and much younger than her husband, to whom she had been married only a few months During the war she had worked in a factory We talked a great deal about the unexpected defeat of Winston Churchill at the polls It was owing, she said—and others agreed—to the soldiers' vote The Labour Party had promised them immediate demobilization the moment they came into power

Towards the end of July Her Majesty and I were back in Portugal

In August 1947, King Umberto and Queen Marie José acted on the firm resolution they had taken on their first day of exile—to bring up Prince Vittorio, their only son, as an Italian The Prince, like his parents, is not allowed to live in Italy, and there are no Italian schools in Portugal So it was decided that he should reside for the greater part of the year in Switzerland, where a number of Italian educational institutions flourish and Italian is one of the three official languages of the country

On August 18, the Queen and the young Prince left by air for Geneva

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he is a benign, enlightened father of the people In Portugal there is far more individual liberty than in certain other countries where the word 'liberty' is bandied about from morning till night It is liberty within a framework of orderly discipline, and one can sense the peaceful, quiet freedom throughout the country

It was during the 'twenties, when Salazar was still a professor, that he was approached by President Carmona and asked to become a member of the Government Salazar was always a sincerely religious man He told the President that he would give his answer after receiving inspiration from a *novena* (nine days' prayer) with a young priest friend of his, who is today the Cardinal Patriarch of Portugal Carmona replied "A *novena* takes too long I will allow you only a *tridium* (three days of prayer)" Fortunately for Portugal, the celestial inspiration was to accept the offer

Salazar rapidly created order out of chaos For the first time for years, Portugal's budget was balanced, roads were built, schools opened, hospitals erected, and scientific and technical institutes founded A beneficent social legislation was introduced, and the workers' standard of living greatly improved And, despite all this, taxation in Portugal is still the lowest in Europe

Salazar deserves respect and admiration he is one of the few really great statesmen of the world Should the dream of a United States of Europe ever become a reality, is there any European better fitted to be its first President?

* * *

At the beginning of January 1947, the Portuguese Government honoured me with the offer of a professorship in the Tropical Diseases Institute of Lisbon I accepted with delight The Institute is old and famous It was founded in 1902, barely three years after the London School of Tropical Medicine Its present Director, João Fraga de Azevedo, apart from his eminence in science, possesses a charming personality, so that the atmosphere among the professors, assistants and students is a very happy one

At the Institute I was given a small laboratory, and was also appointed physician to the nearby Colonial Hospital This

enabled me to continue my research in the fields of tropical medicine, tropical dermatology, bacteriology, and mycology. My happiest hours are spent in that laboratory. I have there, in a small adjoining cubicle, *mon jardin des microbes*, a collection of nearly all the bacteria and fungi I have chanced to find in my long years of work in so many different countries. I enjoy seeing [illegible] down. I look at them as a connoisseur looks at his collection of paintings or rare *objets d'art*. I examine them daily, meticulously: are they still pure, or has some contaminating intruder managed to find its way in? Have they the same healthy appearance as when first isolated, and are they still strong and virile, or do they show signs of senescence and debility? If the latter signs are present, I have recourse to rejuvenating measures. I change their diet and environment, I inoculate them into animals to regain their original vigour.

It is difficult to describe the sentiment one feels for microbes one has discovered. It can, although it may sound far fetched, best be likened to a paternal affection. Some of the 'children' are good and beneficent (yes, there *are* beneficent microbes—I will talk about them later). But whether good or bad one is equally fond of them, just as a parent's affection is as great for the prodigal son as for the dutiful and steady one.

A particular favourite is the very first fungus I found. It was in Ceylon, in the remote year 1904, at the beginning of my career. It produces black patches on the palms of the hands and other parts of the body. Lustre was given to my findings in 1910, when the Chief of the Ceylon Medical Service, Sir Alan Perry, developed such patches on his hands and came to seek my advice. It has endeared itself to me also by the vicissitudes it has experienced. Over ten years ago, a famous mycologist proclaimed to the world that the fungus was not pathogenic (disease producing), but was merely an ordinary harmless mould such as could be seen on old leather boots exposed to warm dampness. Naturally, this was a heavy blow to its 'father's' pride. However, in recent years the same mycologist has very honourably retracted this aspersion, and admitted that he was working with wrong cultures not obtained from my laboratory.

But the chief reason for my affection for this fungus is a spiritual one it enabled me to pay a humble tribute of gratitude to my great and revered teacher Patrick Manson Since it was a new species I could give it a name, and I named it *mansoni*

Another favourite of mine is the fungus I called *Trichophyton rubrum*, owing to the vivid red or bright purplish hue of its colonies Unfortunately it is noxious, causing a most persistent form of ringworm and athlete's foot

Yet another organism of which I am exceedingly fond is an amoeba which bears the grand name of *Amoeba (Hartmanella) castellanii*, it is no relative of the lurid amoeba of dysentery On the contrary, it is a beneficent little creature which acts as a scavenger, engulfing and destroying many pathogenic germs, such as the typhoid and dysentery bacilli It kills a deadly fungus called *Torulopsis* or *Cryptococcus neoformans*, which causes a fatal disease and for which medical science has, as yet, found no remedy, antibiotics and the sulphonamides do not touch it

Microbes, the invisible vegetal and animal organisms known also as bacteria, micro fungi, protozoa, and viruses, have acquired for themselves a terrifying name They are killers and destroyers they cause typhoid, pneumonia, dysentery, cholera, plague, and other mortal diseases of man They cause diseases in animals which are transmissible to humans rabies, anthrax, Malta fever, ringworm And their ravage is not limited to the animal kingdom they attack also the vegetable kingdom, in fecting and exterminating wheat, rice, millet, and tubers, which provide the staple food of millions, and causing the death of plants of immense utility In 1845–46 a fungus (*Phytophthora infestans*)—the potato blight—overran the whole of Ireland, destroying the potato crop and causing famine Widespread desolation and misery resulted, and within a few years the population of that unhappy island fell from nearly seven millions to five and a half millions

In the late 'nineties another fungus, *Hemileia vastatrix*, at tacked the coffee plant of Ceylon, and within three years wiped out all the vast luxuriant coffee plantations of that beautiful island, bringing poverty and ruin to the planters and the whole country

Yet there are microbes and microbes some are pernicious [illegible] and the latter [illegible] t even the

most felonious microbe often shows a generous side it may wound and damage, but, like Achilles' spear, it can also heal. Take the diphtheria bacillus, which causes a dreaded disease of children and adults Its toxin is deadly, yet this same toxin can be used to make vaccine that prevents the disease, and a serum that cures it

And what, after all, are the antibiotics that daily save countless lives all over the world? They are, in effect, bacterial and fungal secretions. It was a virulent and pathogenic microbe, *Bacillus pyocyaneus*, now known in scientific language as *Pseudomonas aeruginosa*, which, at the beginning of the century, provided the first antibiotic, pyocyanin.

A number of microbes never do any harm throughout their lives, but constantly give useful and essential service to man—the true beneficent microbes They play a paramount role in the production of food and drink. They fertilize the soil, without them it would be sterile and produce nothing The seeds of many vegetables and higher plants, for instance, *will not* germinate unless a certain microbe, *Bacillus radicicola*, penetrates and stimulates them, awakening them from their *torpor*

And how is our daily bread made? In the mixture of flour and water—the dough—the baker places a cake of baker's yeast. This yeast is simply an enormous colony of a microscopic budding fungus, *Saccharomyces*, which splits the small amount of sugar always present in the dough (maltose) into carbonic acid gas and a minute amount of alcohol. The dough rises and the baked bread is light, soft, digestible, and tasty (Few teetotallers are aware that, when they eat bread, they imbibe alcohol, although in infinitesimal quantity)

Then there are the cheese gourmets, and the connoisseurs who delight in gorgonzola and other rich cheeses They pay great attention to the green intersecting venules, their size and degree of colour, judging from this the quality of the cheese These [illegible]

[illegible] a blue cheese, and yet another, *Penicillium rocquefortii*, gives its flavour to Rocquefort.

Some people like sour milk, and to certain populations of Africa and Asia *it is* an essential item in their diet. It has become fashionable in high quarters all over *Europe* and America,

since Metchnikoff, many years ago, *proclaimed that it led to* longevity, and that the pullulation of centenarian peasants of Bulgaria was due to their daily habit of drinking yoghourt And *what is it that* produces sour *milk*? Microscopic agents, which may be either exceedingly minute bacteria, or somewhat larger fungal organisms The Bulgarian variety is manufactured by *Lacto bacillus bulgaricus*

Anyone who has visited China will remember the famous red rice It is a microfungus, *Monascus purpureus*, which gives it its brilliant colour The pigment not only increases its visual attractiveness but, according to Chinese experts, also greatly improves its taste

Food is a daily necessity, and microbes play a stupendous rôle in the production of foodstuffs But man is not satisfied with food alone—and water He wants beverages that give zest to food and cheer him wine, beer, spirits Wine is the juice of the grape, but in the absence of microbes it would remain a sweetish, uninteresting, syrûpy liquid, albeit vitamin full It is the intervention of a microscopic fungus, *Saccharomyces*, which, by inducing alcoholic fermentation, transforms the flat, sugary drink into the beverage that warms and exhilarates, praised in song and poem from Anacreon to Belloc Even during the many years when I was a total abstainer—although never a fanatic—I always allowed my patients a little alcohol I was stirred by Belloc's verses

> To exalt, enthrone, establish and defend
> Wine, true begetter of the arts that be
> Awake, Ausonian Muse, and sing the vineyard *song*

I hope some future poet acquainted with the microbic origin of *wine will* one day sing the *praises* of the *Saccharomyces* fungus It will be mere justice

Microbes play an all important part in modern industry Oxalic and citric acid are produced commercially by the action of *Aspergillus niger*, gallic acid by the action of *Aspergillus gallomyces*, pigments and dyes are obtained by the action of *Helminthosporum*, glycerine is a by product of alcohol, from sugar by yeast It would have pleased Sherlock Holmes to know that microbes may be used as detectives—for instance, in cases of criminal poisoning, which are far from rare Suppose it is suspected that some bread, or other food or drink, contains arsenic

a small amount of culture of *Penicillium brevicardium* is added and soon, if arsenic is present, a most penetrating odour of garlic will pervade the room. If a minute colony of that fungus had been present in the newly-decorated bedroom of an ambassadress in a famous European capital, the arsenical nature of the paint used by the decorators would have been discovered in time and a serious illness avoided.

Microbes may be used as detectives in many ways. The doctor often diagnoses diabetes by a microbic procedure, adding a bit of yeast or of a *coli bacillus* culture to the urine: if sugar is present, there will be a bubbling, foamy fermentation.

Microbes may be direct originators of beauty. The connoisseur admires the vivid green 'beauty spots' of polished Tunbridge wood: the wood is of local oak or birch, infected by colonies of a green fungus, *Chlorosporidium aeruginosum*. And not only on wood can fungi produce beauty spots. In the early portion of this book, in relating my years in Ceylon, I have alluded to the golden spots speckling the faces of Sinhalese and Indian maidens, celebrated in song and poetry since time immemorial by the local bards: they are colonies of a fungus, *Malassezia tropica*.

* * *

September 28 1947

A sad day. At noon a telegram arrives from Alexandria: Umberto's father, King Victor Emmanuel III, is gravely ill. Umberto at once decides to fly to Egypt, but there is no 'plane for another twenty-four hours. At four in the afternoon the radio announces the death of the King at 2.30 p.m. Umberto is broken-hearted, and retires to his study.

On the night of the 29th Umberto, accompanied by General Graziani, flew to Egypt, and after some vicissitudes and long delays they arrived in Alexandria in the early morning of the 30th.

The meeting of Umberto and his august mother and two sisters, Giovanna Queen of Bulgaria and Yolanda Countess Calvi di Bergolo, was pathetic and moving. After sad embraces, they all knelt to pray beside the coffin, covered with the tricolor. The following day the body was taken to its last resting place, the Cathedral Church of St. Catherine, where it was

placed in a small *loculum* behind the High Altar. The marble tablet bears the simple inscription 'Vittorio Emanuele di Savoia, 1869–1947'. The funeral was a military one. By order of King Farouk, over ten thousand troops lined the route of the cortège.

I had the honour of knowing King Victor Emmanuel, but not intimately. He received me in private audience at the Quirinal, in 1929, after making me a Senator of the Kingdom of Italy; and again after the Ethiopian War, when he graciously bestowed upon me, *motu proprio*, the hereditary title of Count of Chisimaio. Later, I had several brief conversations with him at the Quirinal and Villa Savoia. He was a serious-looking man, keenly intelligent, honest, and hard-working. But perhaps slightly cold—a northern rather than a southern temperament. He lacked the radiating magnetism of friendliness and human fellowship so prominent in his son Umberto.

Endowed with a pungent and rather ironical sense of humour, there was in his nature a great deal of scepticism (fully grounded); he certainly had no illusions about his ministers or courtiers. His family life was blameless and happy, and this placed him very high in the respect and esteem of his subjects, who, being Latins, are apt to idealize family life, notwithstanding their unjustified reputation for laxity in matters marital.

As a very young man, Victor Emmanuel endured great misery from self-consciousness about his small stature, and because he did not look his best in uniform, although he was a keen soldier, and a brave one too, as he showed in the First World War. In later years his sense of humour prevailed, and he would often joke about his lack of inches He once remarked to a courtier "I hear that people are whispering that I dislike my cousins the Aostas Of course I do They are so tall!" On another occasion he is reported to have said that he felt humiliated by the gigantic stature of his bodyguard of *Corazzieri* (none under six foot), and had in mind to supplant them with a bodyguard of *Bersaglieri*, who are never taller than five feet four

From childhood and throughout his life, Victor Emmanuel had a consuming passion for collecting coins He started at the age of ten with a Pontifical *soldo* (halfpenny) of Pius IX, given to him by his father Gradually he added more *soldi*, and later other coins, until in the course of years the collection became the most complete in the world In 1943 it numbered 106,788

pieces He was a scientific and painstaking numismatologist in his twenty volume work *Corpus Nummorum Italicorum* he minutely classified and carefully described every piece He was delighted when the Italian Society of Numismatics made him its Honorary President, and even more so when the French *Academie des Inscriptions et des Beaux Arts*, a part of the *Institut de France* founded by Richelieu, opened its doors to him and elected him a member

On the day of his abdication, May 9, 1947, and immediately after signing the Act of Abdication, he wrote a letter to Prime Minister de Gasperi, making a gift of the unique collection, valued at over two million pounds sterling, to the Italian State

A passion for collecting coins and medals is traditional among princes of the House of Savoy The famous *Gabinetto delle Medaglie* in Turin was founded by them over two centuries ago It was closed in 1799, and the collections were dispersed when the French, under Bonaparte, invaded the country In 1815, it was reconstituted by Victor Emmanuel I on his return from Sardinia The full collection of coins and medals was donated to the State by Carlo Alberto, in 1848, just a year before the debacle of Novara and his departure into exile in Portugal

I have often been asked by foreign friends what I believe will be the judgment of history on Victor Emmanuel Favourable and sympathetic, I feel sure Democracies have blamed him fiercely for having kept Mussolini in power for so long But can anyone deny that until 1940 (and even later) the vast majority of Italians were for Fascism? And for twenty years, there is no doubt, great benefit accrued to the country, which had completely gone to pieces—and to Communism—immediately after the First World War King Victor Emmanuel was a constitutional monarch, and he listened to the majority He shared Mussolini's ideal of making Italy a great world power, and worked assiduously for that end Unfortunately, he also shared Mussolini's opinion of Great Britain, and the conviction that she was well down on the descending parabola, and this led him to agree, although reluctantly, to the declaration of war in 1940

* * *

In the autumn of 1950 I went to Hamburg, where the Institut für Tropenkrankheiten was celebrating its fiftieth anniversary

Eleven years previously, in 1939, the Institute had honoured me with the Bernhard Nocht Gold Medal, a great distinction.

On the same day, the Society of West German Bacteriologists had held a congress. I was present at a meeting when a discussion arose on the pre-eminent value of the Absorption Test (known in Germany as Castellani's phenomenon) for the classification of certain closely allied bacteria. At the end of the discussion the President stood up and said "You may not know that we have here among us the originator of the test," and he pointed to me. The audience arose and applauded long and loudly. I was moved and deeply gratified

Hamburg still showed ghastly scars of the massive bombardments received in the last months of the war whole sections of the city were mounds of rubble, but clearing and rebuilding was going on at a furious pace, no one was idle I was struck by the mountains of *delikatessen* and food of all kinds in the shop windows. Compared with the extreme scarcity in London, it seemed incredible A German colleague told me that the food supply organization during the war had been nearly perfect, even during the last days, when bombing was continuous, the proper rations had been distributed to the people a typical example of German thoroughness and organization

In April 1952 a Congress on Tropical Diseases was held in Lisbon to commemorate the fiftieth anniversary of the foundation of the Lisbon Instituto de Medicina Tropical A number of tropicalists were invited by the Portuguese Government, among them Professor Felice Pulle of Riccione Pulle is a wonder eighty-seven years old, but still very agile and bubbling with life. He paid me the compliment of choosing as the theme of his talk 'The Three Castellani Signs for the Diagnosis of Latent Amoebiasis' *Amoeba histolytica*, that horrible little protozoan, unicellular microbe causing dysentery and abscess of the liver, has been his chief subject of scientific interest since his early days. He has written a book to prove that Napoleon I did not die of cancer, as generally stated but from amoebiasis amoebic abscess of the liver *Napoleon I' morì per ascesso epatico amebico*"

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Several authorities fiercely assailed the Selection Committee of the Congress for accepting such a paper For myself, I supported the Committee's liberal policy I am very dubious whether the psychic forces employed by Mr de Silva had any effect. Still, who knows? Let it not be forgotten that, until two decades ago we doctors constantly ridiculed the cure of warts by charms cast by old women, until the great Swiss scientist and

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At the beginning of December 1953, I received a gracious invitation from H.R.H. the Duchess Anna of Aosta to attend the wedding of her daughter Princess Margherita to Archduke Robert of Hapsburg. It was an honour to accept, and on the 26th I went with General Graziani, who had also been invited, to Bourg-en-Bresse, the little town in Savoy where the wedding was to take place. This town possesses a number of ancient monuments, and many souvenirs of the House of Savoy in the Middle Ages.

The civil ceremony was performed by the Mayor of the town in the very small town hall. In a row of armchairs at the side sat the Empress Zita, Otto of Hapsburg and his wife, the bride's mother, and several other close relatives. The Mayor donned his tricolor sash and the ceremony, a very simple one, began. The bridegroom, on being asked by the Mayor if he was willing to marry Margherita of Savoy-Aosta, smiled at the bride and answered "Oui" in a sharp and resolute tone. Margherita, smiling and blushing, uttered her "*Oui*" in a low voice. A some-[illegible] Mayor then followed.

In the evening there was another large reception at the Hotel de France. It was a glittering spectacle of splendid uniforms, decorations, and gold braid galore among the men, and elegant, rich evening gowns and priceless jewellery among the ladies. A colourful figure—although of stature somewhat below the normal—was the Papal Nuncio to France in his crimson robes. And very picturesque were the uniforms of the Austrian university students, whose leader wore a long fox's tail in his cap.

* * *

Maria Pia's romance began, and rapidly ripened, in the summer of 'fifty three, during the famous royal cruise of the *Agamemnon*, a new and magnificent vessel, the pride of the Greek Marine Fleet. The originators of the cruise were King Paul and Queen Frederika of Greece, who invited nearly one hundred members of other royal families, mostly exiled, as their guests. The cruise was vastly enjoyed: no etiquette, no ceremony, no formality of any kind. And this idealistic, beatific state of affairs was easily achieved, as it was a one-class boat, only the passengers, instead of being 'tourist' or 'cabin', were all royals.

Maria Pia was the fairest of the many lovely young princesses on board. It was rumoured at first that Prince Christian of Hanover, the thirty two-year-old brother of Queen Frederika, would win her hand, but her choice fell on Prince Alexander of Jugoslavia. Her parents, who were also on board, gladly gave their consent, and the wedding was fixed for February 12, at Cascais.

The Cascais members of the entourage feverishly started preparations for the event. Filled with ardour and zeal, they worked like Trojans, but lack of practical knowledge of *épousailles*, royal or otherwise, thwarted their valiant efforts: the results of their labours were lamentably meagre. The outlook became very black, so a specialist in royal weddings was called in, the same person who had so brilliantly organized the wedding of Margherita of Aosta with Archduke Robert of Hapsburg. Order succeeded confusion, and preparations proceeded smoothly. He did *not* expect—nor did he receive—much help from the royal retinue, and after a brief trial he politely but firmly declined the proffered services of the ancient home-

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That evening, at the Hôtel de France, a banquet was given which was magnificent from every angle, not least the culinary The famous Italian chefs Serge Capelli and Giorgio Cecchi excelled themselves King Umberto toasted the couple in a short speech with his usual charm Otto of Hapsburg also spoke feelingly

The religious ceremony took place the following day in the Church of Brou, a gem of Gothic architecture It was built in the sixteenth century by Marguerite of Austria, and dedicated to the memory of her husband Filiberto of Savoy During the French Revolution the church ceased to be a religious building, and soon became a museum It had been temporarily reconsecrated for the wedding

Hundreds of guests filled the church It was icy cold, I remember, and outside there was a large crowd, with a goodly sprinkling of Italian and Austrian ex-servicemen and war veterans

tiny sacristy the newly-weds, their august parents, the host of royalties, the serried ranks of courtiers and the innumerable guests proceeded to Estoril for the luncheon reception at the sumptuous Hotel Palacio Amidst much applause the bride cut the gigantic cake—six feet high and thirty-one-and-a-half inches wide at the base Carved on its icing were depicted five Portuguese castles and fifty Italian scenes, including the Colosseum and Venetian gondolas Three bakers had worked valiantly for [illegible] multitude of invited [illegible] und-floor *salons* of the [illegible] and in the spacious gardens, hundreds of tables were set, heaped with mountains of food Flowers were everywhere, and champagne flowed in rivers

On the evening of the wedding King Umberto gave a magnificent banquet at which over one hundred royal guests sat down At the end of the dinner, King Umberto toasted the bride and groom in a charming little speech The bridegroom's father replied with a deep inclination of the head—Prince Paul has always been known for his aversion to oratory

The banquet over, the 'royals' filed into a very long, rather narrow *salon* adjoining the banqueting hall, and stood in a lengthy single row, at the head of which were the bride and groom and their parents, followed by all the other princes and princesses in order of precedence The doors were thrown open, and the guests who had been waiting outside entered They congratulated the couple, and then paid homage to every royalty in the long file

March 24, 1953

Commendatore Olivieri, General Graziani, and I accompanied King Umberto to England to attend the funeral of Her Majesty the late Queen Mary We stayed at the Savoy Hotel The Lord Chamberlain's office sent Lieut.-Colonel FitzWilliam, a tall, distinguished looking, efficient gentleman, to take charge of us, a car of the British Court was placed at our disposal

The funeral ceremonies, both at Westminster Abbey and later at Windsor, were very impressive, and were carried out in the prefectly smooth manner traditional of the Lord Chamberlain's office The crowd was mournful, but one had the feeling that the death of Queen Mary—although she was greatly respected

courtiers who had been dribbling into Cascais from the mother country The specialist was once reported to have muttered rather audibly 'These blazoned asses talk interminably and accomplish nothing They scurry round like rabbits and beget only confusion The sole use I can make of these fellows encased in their resplendent, if slightly tight and mothball redolent uniforms, is as ornamental fixtures in the apse and transepts of the church on the nuptial day" (And he did)

Our expert excelled himself, and the result was an historic success No, I will not tell you the name of the transcendent gentleman He is an historian of repute, a littérateur, and a scientist, and I feel his name should remain known for his achievements in those fields rather than for his inborn genius in *organizing fashionable and regal weddings*

The wedding took place in the Church of the Assumption, in the little village of Cascais, on the appointed day—February 12, 1954, at midday It was a never-to-be forgotten spectacle The path to the church door was marked by a long scarlet carpet, flanked on either side by a file of Portuguese police, hand linked, and looking very smart in their blue uniforms especially laundered and pressed for the occasion The beautiful bride, in her gleaming white satin robe, with its long train walked along the path on the arm of her father, closely followed by Prince Ruffo della Scaletta, General Infante, and myself, according to instructions received from *His Majesty On both sides there was* a milling, eddying mass of people, mostly Italians who had come to Cascais by air, road, and boat to see their princess wed Inside the tightly packed little church an impressive quiet reigned The bride and groom knelt before the High Altar, and five or six yards behind them sat their august parents and the normal phalanx of Cascais and Estoril royalties, much swollen by new arrivals from all parts of Europe From England came the Duchess of Kent, aunt of the groom, in what a lady expert described as a 'delightful pink champagne dress and fur-trimmed hat ensemble'

The marriage ceremony, conducted by the Prior, Father Antonio Pereira de Almeida, was simple and very short, owing to the difference in religion of the bride and groom, the *Princess* being a Roman Catholic and the Prince a *member of the Greek* Orthodox Church

Immediately after the signing of the marital contract in the

emotion asked us to inform His Majesty that King Carol had died suddenly during the night.

deepest black crepe On behalf of His Majesty we offered our condolences

Later in the morning the large *salon* on the ground floor was turned into a *camera ardente*, and a religious service was held at which Canon Farrie, Chaplain to the British Embassy, officiated (In Portugal there is no cleric of the Orthodox Church, but the Church of England is 'in communion' with it.) The room was full of flowers, and in the centre of it stood the ornate coffin draped with the Roumanian flag

The funeral took place on April 8 The body was taken to Lisbon to the Church of São Vincentu, the Portuguese Pantheon (one of Carol s ancestors was Portuguese), and placed among the dead kings of Portugal, whose embalmed bodies, until a comparatively short time ago, lay exposed to view in glass cases (The populace used to refer to them, with little reverence or respect, as the 'pickled kings') King Carol lies there among them until he can rejoin his forefathers in his own country

I knew King Carol fairly well I was first presented to him when, with several other doctors, I was called, in 1938, to Bucharest for a consultation on his mother, Queen Marie One night a Roumanian colleague took us to Bucharest's smartest night club A few yards from our tables sat a fascinating, vivacious young woman, with masses of gleaming red hair, surrounded by a group of lively men and women "Magda Lupescu,' whispered o r host

In Septen
Carol to lea
teen years o
panied by
y large retinue, he wandered from place to place—Switzerland, France, Spain, Portugal—welcomed nowhere In June 1941, the party set off for Cuba and shortly after proceeded to Mexico In Mexico both the King and his companion became very popular, especially among the members of the American and British colonies Madame Lupescu joined the Mexican Red Cross and was most assiduous in her work

—did not deeply stir the emotions of the people, but represented rather the passing of an era.

I had the honour of meeting Queen Mary in the past. The first time was at a Garden Party at Buckingham Palace, where one of her Gentlemen of the Court, who was a patient of mine, presented me to her. Her Majesty misunderstood my name as 'Castellain', and thought I was a Frenchman. She asked me in perfect French how long I was staying in England, and whether I was enjoying my visit. The Gentleman-in-waiting then whispered, "It is Castellani, the sleeping-sickness man." The Queen looked at me and very graciously said, "I thought the discoverer of sleeping sickness was a far older man."

A few years later Queen Mary took a great deal of interest in the Ross Institute, of which her son the Prince of Wales was Patron. The Director-in-Chief of the Institute was then Sir Ronald Ross, and the two other directors were Sir William Simpson and myself. I remember Her Majesty coming to the Institute two or three times, during the serious illness of George V, when he had empyema and was operated upon. Her Lady-in-waiting, whom I had attended professionally, told me that several times the Queen had expressed the desire that I should be called to attend the King. But His Majesty's physician, Lord Dawson of Penn, had replied that empyema was not a tropical disease (and he was certainly right there).

The first impression that Queen Mary gave me was of being rather unbending, but once we started conversing this feeling soon dispersed, and one was enchanted with her extreme graciousness.

The Prince of Wales, too, honoured the Institute with his presence from time to time. He was a real Prince Charming, and in addition to charm had plenty of brains and courage. Once, while he was in my laboratory examining and handling some test tubes containing live cultures of the plague bacillus, one test tube dropped on the floor. The average person, knowing that it contained the virulent plague organism, would have shown some nervousness: he showed none.

April 7, 1953

Early in the morning the telephone rang: it was Urdareanu, the Marshal of the Roumanian Court, who in a voice broken by

the numerous and turgidly staffed advisory missions of military, commercial, and other matters that have taken firm root in the hospitable soil of Portugal

It is customary to run down diplomats as a frivolous and lazy crowd I don't agree My profession has brought me into contact with many of them—and, moreover, for years I was on the Foreign Affairs Committee of the Italian Senate. My experience is that they are hard-working men; most of them dislike intensely the time they have to give to social duties, and especially loathe the unend [illegible]

[illegible]

crats who suddenly blossom into ambassadors and ministers One of the greatest ambassadors I have known, however, was a non-career man, though diplomacy was in his blood, both his father and grandfather having been ambassadors He was not a politician, nor a [illegible] gist, and a philosop [illegible] his mental equilib [illegible] diplomatic technique was of the direct pattern, not tortuous or Machiavellian, and was very successful His name is Lincoln McVeagh.

Another non-career but most remarkable and successful ambassador is the present Portuguese Ambassador to the Court of St. James, Pedro Teotónio Pereira, a distinguished diplomat and statesman of high stature—an admirer and loyal friend of Salazar.

Should I be asked which diplomat I have admired and respected most during these last ten years in Portugal I would [illegible]

[illegible] full of dignity, there is not a vestige of pomposity about him, and, though a deeply religious man, no trace of bigotry He is rightly considered a shining light of Vatican diplomacy, which is the most famous in the world

* * *

In March 1955, the Latin Medical Congress took place in Rome, and I was especially invited to attend Having advocated

In September 1944, they left for Brazil, where, in the summer of 1947, Madame Lupescu fell desperately ill King Carol, beside himself with grief, decided to marry the dying woman who had been his faithful friend for so many years The simple civic ceremony took place on July 5 in her bedroom A miraculous recovery occurred, and Carol, exultation and happiness in his heart, bestowed on his wife the title of Princess Helene of Roumania Doubt has been cast by some authorities on royal titles and matters of heraldry on the validity of this dignity, as it was not conferred by King Michael, in fact, King Michael never answered his father's letter concerning the subject Members of Carol's Court, however, have always maintained that as Carol, on relinquishing the throne, did not sign an act of abdication, while Michael did, the rightful monarch—and therefore the rightful dispenser of titles and honours—was all the time Carol, not Michael

Carol and the Princess, with their retinue, landed in hospitable Portugal in 1947 and took up their abode at the Hotel Palacio in Estoril, later moving to a charming large villa, 'Mar y Sol'

Few people know that King Carol and Princess Hélène went through a second marriage ceremony in Portugal because it was rumoured that their Brazilian ceremony might be considered invalid in European countries

I often saw King Carol, and had a number of conversations with him He was pleasant and affable, but one sensed that under this veneer of charm there was hidden the hard-hearted 'Hohenzollern' Who can forget his savage suppression of the Iron Guard?

Princess Helene possesses intelligence and wit—and, her enemies add, much cunning and great powers of intrigue She is still endowed with plenty of good looks an ivory skin, masses of flaming red hair, luminous eyes, and a great deal of personal magnetism

* * *

Society life in Lisbon is centred in and around the Diplomatic Corps This 'corps' is of large proportions, on every other car in Estorial and Cascais you will see the magic plate 'C D' The surfeit of C D s arises, not from the number of genuine diplomats, but from the multitudinous 'paradiplomats', members of

of the immense oblong room, with its marvellous frescoes adorning the walls and ceilings, His Holiness sat on the throne, the spiritual symbol of the Church. On his right stood a high Vatican official in purple, immobile, on his left, another high cleric. About twenty yards in front of the throne, to the right, sat the cardinals, to the left, the academicians, and right at the back of the hall, the public

At the end of his address the Holy Father rose from the throne —a tall, ascetic, frail looking figure in white robes His eyes sparkling with fervour, he stretched out both arms, uttered a few words of prayer and exhortation, and then gave his blessing Everyone knelt, and the eyes of many of those hard bitten scientists were glistening

* * *

At the beginning of 1946 little Princess Maria Gabriella of Savoy, the second daughter of Umberto (then *Luogotenente*, acting for the King), had fallen ill with typhoid in Switzerland, and I was called to see her. She [illegible]

[illegible]

that I had been called in from Rome to see her because I "knew *a lot* about microbes and had discovered some new ones" On my second visit the little Princess asked shyly "Professor Castellani, will you please give my name to one of your microbes?" I was astonished at this request from one so young, and thought it was just a childish whim.

Since then the princess has grown up into a beautiful young teenage girl, and on many occasions, to my surprise, has repeated her wish Eventually I promised that if perchance in the near future a new microbe came my way I would name it after her "But it will have to be a nice microbe," I added

In the latter part of 1954 I found a coccoid organism which does not give rise to any serious disease—just a little redness of the skin—and is a very pretty microbe producing lovely mauve-coloured colonies when planted on potato "That's the microbe for you," I told the princess, "but, before I can call it after you, you must first obtain your father's permission." [illegible] [illegible]berto

[illegible] *Société*

[illegible] Paris

internationalism in medicine all my life—science knows no boundaries—I at first refused, but the pressure put upon me by old friends and pupils Mario Girolami and Biagio Urso, and many other Italian, French, and Spanish colleagues, could not be resisted I went

It turned out to be a very interesting congress, and some of the papers read were of singular value, one or two bearing rather unusual titles One eminent French professor, banging the rostrum in his zeal, delivered a fervent address entitled, 'Place aux Veins'! It sound exactly as if he had said 'Place aux Dames'! He talked with great feeling about the veins being relegated to an inferior place vis-a-vis the arteries, and how wrong this was His fiery discourse in defence of the veins greatly impressed the audience, and one or two members thought it necessary to take up cudgels for the arteries I was not aware there existed such deeply rooted jealously between the two groups of blood-vessels

On April 25, 1955, the annual meeting of the *Accademia Pontificia delle Scienze* took place The Academy was founded by Pius XI but was inspired by the late Pope, Pius XII, who was then Cardinal of State

It is a unique academy It is international, and the membership, like the number of cardinals, is restricted to seventy-four They are selected and appointed direct by the Holy Father, they have a rank corresponding to that of Archbishop, and the title of 'Excellency' Eminence in clinical medicine alone does not open the doors of the Academy, but research and achievement in pure science The three or four medical men, including myself, who belong to the Academy have been selected for work they did in other days in the pure basic sciences physiology, anatomy, bacteriology

The seat of the Academy is a villa of exquisite architectural design in the Vatican gardens, but the annual meeting is held in the Vatican Palace

His Holiness gave an address lasting over an hour, without a single note, and touched on the most diverse and abstruse subjects, as the Academy contains representatives of every branch of science He talked with deep knowledge and comprehension on the higher mathematics, on astronomy, geology, physical and chemical science, botany, and zoology

It was a unique, never-to-be-forgotten spectacle At the end

party of Amalfitan noblemen went to Jerusalem with the object of protecting the Christian pilgrims and looking after their welfare Not long afterwards, the members of the Order apparently became warriors as well as religious men They took vows of obedience, poverty, and chastity like other religious bodies, and [illegible]

poor and sick, and warriors At different times they conquered Cyprus, Rhodes, and other Mediterranean islands, erecting churches, hospices, and castles wherever they went They never forgot their charitable principles, and throughout their history paid special attention to the lot of the lepers

In 1530, when the Knights lost Rhodes to the Mohammedans after an epic resistance, the Emperor Charles V appointed them feudal owners of the islands of Malta, Gozo, and Comino, and also of the [illegible]

Napoleon Soon afterwards, in the long struggle between France and England, it fell to the English

The Congress of Vienna (1815) decreed the return of Malta to the Knights, but the British apparently replied in the old Roman way *Hic bene sumus*, and did not budge

From then on the Order remained without its temporal power, but it retained, and still retains, certain privileges reserved to sovereign states For instance, it can issue passports, and has embassies and legations in a number of countries, including Austria, Portugal, Brazil, and Spain The members o the Order, if no longer warriors, are still knights of religion and charity, and do an immense amount of good in many countries

The 'capital of the Order is Palazzo Malta, Via Condotti, Rome It is an edifice of imposing appearance, and contains a magnificent collection of historical pictures and souvenirs The Gran Maestro lives there, as well as other high ranking Knights, most of whom have made vows of celibacy

The congress was successful resolutions were passed to alleviate the harsh conditions under which the leper has lived since remote times He has ever been an outcast, a pariah, an untouchable While any other disease arouses pity and compassion, leprosy causes repulsion and terror, and the sufferer is

on July 5, 1955, I read a paper on this new organism and suggested for it the name *Micrococcus violagabriellae* When it became known that the germ was named in honour of a princess of the House of Savoy, the whole audience with one accord rose to its feet, applauding A copy of the certificate giving the microbe its name hangs upon the wall of her room I wonder how long it will remain there? The young Princess often enquires about my microbes, and in a recent letter asks particularly after the health of her own

* * *

March 29, 1956

A sombre day for the Spanish royal family Little Alfonsito, the youngest of the Barcelona children, met with a tragic end In the afternoon he was target-practising with his brother, nineteen-year-old Prince Juan Carlos, using a 22 pistol Later they accompanied their parents to church, where they took Holy Communion In the evening at about eight-thirty, just before dinner, the princes went to the playroom upstairs and Alfonsito started to clean the pistol The boys were unaware that a bullet had remained in the barrel of the weapon it went off suddenly, and Alfonsito fell, shot between the eyes He died in his brother's arms three minutes later

The following day the body of the little prince lay in state in the house, and hundreds of people of all classes came to pay their homage The funeral was on the 31st At the last farewell, when the body was lowered into the grave, Don Juan, his father, broke down with grief, tears streaming from his eyes

Everybody loved Alfonsito He was a bright, intelligent boy, sparkling with life, healthy and handsome, with blue eyes and sandy fair hair

* * *

In April 1956, a congress was organized in Rome by the Sovereign Order of Malta for the 'Defence and Social Rehabilitation of the Leper', under the Presidency of the famous surgeon Paolucci di Valmaggiora I was the Honorary President

In England and America little is known about the Sovereign Order of Malta, yet it has an interesting history The Order, which has in the past borne several different names, came into existence about the middle of the eleventh century, when a

The young man asked for the diagnosis The Professor, in reality a kindly man, but somewhat abrupt, replied bluntly 'Leprosy "

'Are you certain of the diagnosis, sir?'

'Quite certain "

The boy, not a muscle of his face moving but ashen pale, the three small spots standing out vividly, offered his fee, which the Professor refused He returned to his home Half-an hour later he was dead he had shot himself through the temple

For years I have joined with the small band of doctors who have fought for a relaxation in the cruel measures imposed upon lepers by society These must be relaxed or abolished, even if they were necessary in the old days, they are not so today Leprosy is not a highly infectious disease—much less so than tuberculosis Moreover, in the sulphones discovered some years ago we now have drugs which, if they do not always cure, practically always halt the further progress of the malady

* * *

My story is ended In deep humility I thank Providence for having granted me a long, active, and perhaps not useless life Above all, I thank Providence for [illegible] be a doctor [illegible] many years [illegible] and research Can there be a greater satisfaction than to assuage pain and restore health to the sick? Can there be a worthier ambition than to add a new stone, however small, to the never-completed edifice of knowledge?

often treated as if he had contracted the affliction through his own fault

In the Middle Ages lepers were immured for life in lurid *lazarettos*, but these institutions were so constantly overcrowded that many lepers had to live outside They were then compelled to wear special dress, to use a clapper or bell when walking along the road, to indicate only with a stick the articles they desired to buy in the market They were forbidden to drink from the public fountain, to touch children, to speak in a loud voice to a healthy person, or to eat with any person other than a leper In some Continental countries the Church performed the burial service over a person who had been declared a leper, and officially and legally he was dead

In England and Scotland the leper's fate was a little better than on the Continent Many churches in Britain had peepholes in the chancel (some can still be seen) where these unfortunate people might take part in the sacraments without entering the church

Although the horrible 'leprosaria' of the Middle Ages have disappeared, the cruel and harsh treatment of the leper has continued Even now, when we doctors make the diagnosis of leprosy we give, in effect, a sentence of lifelong imprisonment and social ostracism

An event of my student days has remained indelibly stamped on my memory It was the remote year 1899, and I was a *studente interno* of the University Clinic for Internal Diseases, but even in those days I was fascinated by skin diseases, and all my spare time was spent in the Dermatological Clinic

One day a refined looking young man—the scion of a long and noble line—came to see the Professor he had been in Brazil for a couple of years, and had noticed recently three small reddish patches on his left cheek on which he did not feel the razor when shaving (loss of sensation to touch and pain is one of the first symptoms of leprosy) The Professor made him undress, and found similar patches on his body With a needle he pricked one of them deeply the boy did not wince From the same patch the Professor drew a drop of blood, and asked the chief assistant to stain it with 'Ziehl' (a staining method to put in evidence the leprosy bacillus) This was done while the patient dressed, and the assistant returned with the result positive

APPENDICES

CLIMATE AND ITS INFLUENCE

As a medical man who has lived in widely different climes, torrid, hot, temperate, and glacial, it is not unnatural that the [illegible] Moreover, what does [illegible] In his celebrated [illegible] the study of climate for "whomsoever would wish to pursue the study of medicine" In a very humble way I have followed his example, and in 1932 I published a little book called *Climate and Acclimatization* which had a second edition in 1938 In it I endeavoured to show the importance of climate and its effects on man, beast, and vegetation, and its powerful, though indirect, influence on the course of human affairs and civilization

What is Climate?

The terms 'weather' and 'climate' are often used colloquially as synonyms, but this is an error Weather is the complex of atmospheric conditions in a locality at a given time, the time of observation, while climate is the aggregate of atmospheric conditions of a country or region extending over long periods of years The principal factors which go to form a climate are temperature, humidity, atmospheric pressure, electrical phenomena, *sensu latissimo*, including cosmic irradiation (the first two of paramount importance) These are variable, but depend a good deal on the so-called *fixed factors*, the most important of which [illegible] and t[illegible] many [illegible] nomical, or solar tropical, temperate, and arctic climates There is a geographical classification continental, oceanic, insular, and littoral climates There is a topographical classification plain, hill, mountain, valley, and desert climates There is even a physiological classification stimulant, tonic, relaxing, and depressing climates And there are many others

CLIMATE AND ITS INFLUENCE

AS A MEDICAL MAN who has lived in widely different climes, torrid hot, temperate, and glacial, it is not unnatural that the subject of climate should appeal to me. Moreover, what does the Father of Medicine, Hippocrates, say? In his celebrated treatise *Airs, Waters and Places*, he emphasizes the study of climate for "whomsoever would wish to pursue the study of medicine." In a very humble way I have followed his example, and in 1932 I published a little book called *Climate and Acclimatization* which had a second edition in 1938. In it I endeavoured to show the importance of climate and its effects on man, beast, and vegetation, and its powerful, though indirect, influence on the course of human affairs and civilization.

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Climatic Changes in Prehistoric and Historic Ages

As is well known, in prehistoric periods tremendous climatic changes occurred, but there is evidence that in historic times a series of 'climatic pulsations' has taken place, although on an infinitely smaller scale Cycles of eleven, thirty-three, and four hundred years have been described, seemingly related to the sun spots and their periods of fluctuation Evidence of the shorter cycles is gathered from the study of tree rings and silt layers of alluvial deposits, and from the advances and recessions in the earth's glaciers and ice-caps The present slow upturn in world temperatures, which has been in progress for about a hundred years, is said to be related to a four-hundred-year cycle

There is little doubt that the climate of Egypt, Palestine, Greece, Mesopotamia, and Northern India, many centuries ago when those countries were at the acme of their civilization, was sensibly different from the present day

The local climate of a region or a district may be altered for the better within a few years by afforestation, the regulation of rivers, the filling up of marshes, and other agricultural works, or for the worse by neglect of such measures The climate in Rome, for instance, has become much more agreeable and less humid during the last three decades, subsequent to the filling and draining of the Pontine Marshes and the afforestation of many neighbouring hills

Climate and Vegetation

Climate is the chief factor in the character and distribution of vegetation Several zones have been described There is the zone of palms and bananas at sea level (under the equator), average temperature 82–70° F , the zone of ferns and figs, from sea-level to 2,000 ft , average temperature 78–73° F , the zone of myrtles and laurels from 2,000 to 4,000 ft , temperature 73–68° F , zone of evergreens from 4,000 to 6,000 ft , temperature 68–60° F , zone of deciduous trees from 6,000 to 8,000 ft , temperature 60–40° F , zone of conifers from 8,000 to 10,000 ft , temperature 48–40° F , zone of lichens from 10,000 to 12,000 ft , temperature 40–32° F , zone of mosses from 12,000 to 14,000 ft , temperature 32° F and lower

Climate and Animals

Some species of animals can live and thrive only in certain climates, others when moved from their indigenous to other climates undergo distinct and sometimes profound changes in their appearance A luscious Swiss milch cow transferred to the plains of India from her Alpine home soon loses her glamour and her opulent curves, her coat becomes rough and her turgid mammary glands wither, while her offspring are miserable, stunted creatures, which cannot in any way be compared with the 'children she had when in her native country The same remarks apply to horses, and domestic animals in general, when they are moved from the temperate into the tropical zone The alterations in appearance may become permanent after some generations, and a new race or variety is born

Climate and Man

Man may live in any climate, from the equator to the poles, and at first sight might seem to be independent of climate, but it must be remembered that it is only by artificial measures that he can effectively combat the climatic effects which would otherwise overcome him, he creates artificial climates, for instance, by clothing Yet his natural tolerance to widely different climates is remarkable

The inhabitants of Jacobabad, India, live in July in a temperature of 96° F , two degrees less than the temperature of the body And on the other hand the inhabitants of Verkhoyansk, in Northern Siberia, endure a midwinter temperature of −60° F to −80° F , or 92° F below freezing In the temperate zones in winter, people often pass suddenly from a warm room, with a temperature of 75–80° F , to outdoors, with a temperature of zero or below, and in the Arctic the Eskimo passes frequently from an indoor temperature of 80° F in his 'igloo' to the terrific cold outside

Climatic Optimum for Man

Notwithstanding the opinion of a few authorities, there cannot be any doubt that, just as there is a climatic optimum for animals and plants, so there is a climatic optimum for man Any departure from the optimum for a given race renders its members less efficient, and also more susceptible to disease Ranke

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has carried out a great deal of investigation on the subject and has concluded that, other climatic factors being favourable, the optimum temperature of the European with medium clothing is 59 64° F Huntington believes that the parts of the world which are at the present time most suitable for the highest development of civilization are Western Europe, Southern Canada, the Central and Eastern parts of the United States, New Zealand, South east Australia, and Japan Seasonal and daily changes in climate are of importance in achieving the highest degree of mental activity, which seems to reach its maximum in the spring and autumn, and its minimum in midwinter and midsummer Huntington believes that grey days are best for efficiency and work, the cheering effect of fine weather being antagonistic to concentration This last belief may be correct in regard to ordinary routine work, but certainly not in regard to creative work I have had the honour of knowing well two famous poets, and a number of writers, they have all told me that inspiration came to them much more easily on a bright sunny day than on a damp foggy one

Influence of Climate on the Feeling of 'Bien Être', on Humour and Temper

Who has not experienced the exhilaration given by bracing air, or the depression and fatigue caused by a relaxing climate, and the tendency to chronic discontent and peevishness when living in a windy, cloudy, near the sea climate? Robert Burton, in his famous *Anatomy of Melancholy* (1620), wrote

"Such is the Aire, such be our spirits and as our spirits, such are our humours

or too cold and dr

tempestuous Aire

people are ordinarily so *cholericke in their speeches, that scarce* two words passe without railing or chiding in common talke, and often quarrelling in the streetes

" Cold Aire in the other extreme is almost as bad as hote In those Northern Countries, the people are therefore *generally dull, heavy*, and there are many witches In a thicke and cloudy Aire (saith Lemnius) men are tetricke sad, and peevish and if the westerne windes blow, and that there be a calme, or a faire sunshine day, there is a kind of alacrity in men s minds, it clears up men and beasts but if it be a turbu

helps the Memory", he asserts, and he recommends the suf-

Beneficial Action of an Occasional Change of Climate

However favourable the climate one lives in, an occasional change always does good When I was in Ceylon, many of the European planters were patients of mine—and I seldom knew nicer and more likeable men. Most of them lived in the low country and cursed the heat and perspiration it caused, and the permanent feeling of utter exhaustion They all envied the few planters in charge of tea estates near Nuwara Eliya (over 3 000 ft.), where the climate is delightful and always cool Yet these mountain planters not rarely came down to Colombo to see me, complaining of nervous symptoms and general debility and requesting a medical certificate recommending a fortnight s change to the low country

Like most doctors I have always been of a liberal disposition in regard to granting certificates, but I must confess that at first I felt inclined to refuse the request in these cases Why should a man, certainly not seriously ill, desire to go from the cool, perfect climate of Nuwara Eliya to the burning steaming heat of the low country? I suspected that the lure was not the recovery of health but the glittering bars and spacious dance halls of the Galle Face Hotel in Colombo, known all over the East! I soon convinced myself, however, that my planter friends were right after a two-week stay in the heat they felt extremely well and went back to their estates in the mountains very happy, full of vigour and energy, and bursting with the urge for immediate and plentiful hard work.

Robert Burton also wrote

" Although our ordinary aire be good by nature of art, yet it is not amisse, as I have said, still to change it, no better Physic for a melancholy man than change of aire "

Effect of Climate on Bodily Temperature and Functions

Climate has little or no action on the bodily temperature of man, which remains round about 98° F. whether he lives in the Sahara or in the polar regions, provided of course that he is in normal health and properly clad: he is, in scientific jargon, a 'homeothermic' animal.

Climate has very little effect on respiration and circulation, although the blood pressure has a tendency to become slightly lower in the Tropics and the Far East. Mills, the famous climatologist, has noted that Americans going to China show a distinct fall of blood pressure within two years, although remaining on practically the same diet as they had at home; Chinese settling in America show a rise.

In tropical countries the urinary secretion is much lessened, owing to heavy perspiration, this predisposes to the formation of calculi. In the Sudan, where the climate is very hot and dry, even children of four to five years of age may be found to be suffering from stones in the bladder and the kidneys.

In the newcomer, sexual desire and sexual power may show an increase for a time, but soon diminishes, although fertility is not affected The endocrine glands are at first stimulated, then depression sets in The suprarenals are depressed, and this is probably the cause of the constant lassitude felt in the Tropics

A tropical climate usually has a noxious effect on digestion The appetite is diminished, and thence arises the desire for spicy foods—curries, chilli, and the like The gastric secretion is decreased and its acidity diminished, and thus facilitates in- [illegible]

mate. The higher mental centres tend to lose control over the lower, and this causes the chronic 'tropical irritability', and in bad cases the sudden outburst of murderous fury which the Germans call 'Tropenkoler', and the French 'Soudanite' and 'Biskrite' Similar conditions are found in mountainous countries with a very cold climate and the air charged with electricity. At Arequipa, Peru, these acute outbursts of irritability and anger are known as 'Nevada', and the condition has received legal recognition, it is considered an 'extenuating circumstance'

in cases of crime In the Tropics I described 'Cacophoria Tropicalis', of which I will say more later

A tropical climate has a bad effect upon the skin in a hot damp climate it is always very pale, flabby, and moist, with visible perspiration, in dry hot climates it is dry and becomes cracked and inflamed

Effect of Climate on Women and Children

"How pale and ill European women and children look!" This is the first exclamation one hears from visitors to Ceylon [illegible] affected, it loses elasticity, and minute wrinkles appear round the eyes and mouth years before they do in England The hair becomes lustreless and its colour fades, and it often falls out. In such a climate exposure to the sun seldom induces a diffuse tan in old residents the skin remains pale with a few freckles here and there

The average English or American woman in the Tropics stands the climate less well than the men True, the incidence of serious disease is lower in women than in men, but this is because the latter, in their work and sport, expose themselves more frequently than do women to insect-borne diseases such as malaria, relapsing fever, and sleeping sickness

Menstruation begins earlier in the Tropics than in northern countries, but the menopause takes place at about the same age, forty five to fifty One must keep in mind, of course, racial traits in Louisiana white girls menstruate at about fourteen, and coloured girls at about thirteen However, there is never unanimity of opinion in the medical world The classic notion that menstruation begins earlier the nearer one gets to the equator is denied by Mills and a few other authorities, who believe the reverse to be the case

Pregnancy is a more trying time than in the temperate zone, and lactation is difficult. Few European women can nurse their babies more than a *few weeks* Babies are born as healthy in the Tropics as they are in the temperate zone, and up to eighteen months or even two or three years of age they are plump and healthy and flourishing They may, indeed, occasionally look stronger and bigger, and walk earlier than at home Older

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A tropical climate usually has a noxious effect on digestion The appetite is diminished, and thence arises the desire for spicy foods—curries, chilli, and the like The gastric secretion is decreased and its acidity diminished and this facilitates infections, bacteria no longer being destroyed by the gastric juice Old residents always complain of the liver—*tropical liver*,—and of their insides—*tropical tummy* Apart from the alimentary organs, *the nervous system* is the one worst affected by a tropical climate The higher mental centres tend to lose control over the lower, and this causes the chronic 'tropical irritability', and in bad cases the sudden outburst of murderous fury which the Germans call 'Tropenkoler', and the French 'Soudanite' and 'Biskrite' Similar conditions are found in mountainous countries with a very cold climate and the air charged with electricity At Arequipa, Peru, these acute outbursts of irritability and anger are known as 'Nevada' and the condition has received legal recognition, it is considered 'an extenuating circumstance'

infection may be carried by flies, but is more frequently acquired by simple contact

Sunstroke

He who has seen a case of sunstroke will never forget it An individual, apparently in perfect health, is walking or standing in the sun (although an attack may also come on in the shade, or on a cloudy day) suddenly he totters and crumples up unconscious You run to help him his face is red and swollen, his eyes closed, his breathing stertorous as if struck by apoplexy His pulse is full and frequent, and his temperature very high, 103 104° F Take him immediately to a shady place, remove his cloth [illegible]
if [illegible]
to [illegible]
tropical countries, air-conditioned heat stroke first aid stations are found in the worst districts Have your patient carried to one of these, it may save his life.

And here let me make a digression to demonstrate to what heights fashionable theories may rise When I was a student at the London School of Tropical Medicine at the beginning of the century, bacteriology ruled supreme Every disease was due to microbes, even beri beri, scurvy, and pellagra One of our lecturers, and a very clever one, taught us in all seriousness that sunstroke was a bacterial infection, which he called siriasis It is true, however, that convalescents from sunstroke seem to be very liable to pick up secondary bacterial infections

Coldstroke

This is the counterpart of heat-stroke, due to cold instead of heat. Intense cold may cause local lesions, such as chilblains, frost bite, trench foot, and immersion foot, but may also cause general symptoms whether local lesions are present or not The condition was well known to the ancients, numerous cases occurred in the retreat of the ten thousand described by Xenophon also in the army of Alexander the Great in the Caucasus In more modern times the Napoleonic army, during the retreat from Russia, suffered from it greatly During the last two World Wars of this century true coldstroke was rare, but localized lesions due to intense cold, and cold and humidity, were quite common for instance, 'trench foot' in the First World War, and

children up to eight or ten are usually pale, weak, and apathetic, and they have not the energy and vivacity of children of the same age in temperate climates A tropical climate predisposes children to dysentery and 'worms', on the other hand, it has a partially preventive action to scarlet fever, diphtheria, and true rheumatic fever After the age of seven or eight many children, especially boys, do not do well in the Tropics, they grow fast, are weedy (though occasionally they may become obese), the nervous system is over-stimulated, and precociousness in sexual matters is common As a general rule, male children should be sent home at no later age than eight or nine years When this is not possible, they should be sent to some hill station and brought up there, though from a medical point of view this is less satisfactory than sending them home

Climate and Disease

In the past, 'climatic diseases' were exceedingly numerous, most of them, however, have been proved to be of other origin, chiefly parasitic and nutritional One has only to read the reports of the medical officers of Napoleon's army in Egypt and Palestine (1798–1801) what they then considered a climatic bladder disease was bilharziosis (caused by a worm *Bilharzia haematobia*), what they called Egyptian anaemia was in reality ankylostomiasis (caused by the worm *Ankylostoma duodenale*)

True climatic diseases, that is to say diseases due directly to climate, are extremely few, sunstroke and coldstroke are the two best examples Climate, however, plays a very important indirect role in the causation of many serious maladies Why is malaria, generally speaking not found in cold countries although anopheles mosquitoes may be present in abundance? Because the malarial parasite does not develop fully in the anopheles when the environmental temperature is below a certain degree Why is sleeping sickness limited to certain African areas? Because the tsetse fly that carries it has certain climatic requirements found only in those regions

Climate greatly influences the spread, not only of air- and insect borne infections, but also—although this is difficult to explain—of certain diseases acquired by contact. For example, yaws, that scourge of so many tropical British colonies, in which the patient becomes covered with innumerable framboesiform, raspberry like nodules, is never found in cold countries The

of the Red Sea round about Aden, but for reasons as yet unknown it is much more frequent there than in any other tropical region of the same latitude

'Pes Dolorosus'

I have seen this condition in Rome, Egypt, and Libya, but not in the real tropics The patient, generally a woman of northern extraction, complains of severe burning, tenderness, and a feeling of swelling in the feet. She often describes the condition as fever of the feet', and has to kick off her shoes. Walking and exercise aggravate it but are not the cause, as it is often present on rising in the morning On examining the feet, you find nothing really abnormal, there is no diffuse redness, the arteries are not throbbing and the veins are not turgid The whole foot, particularly the instep, may show occasionally a slight swollen appearance, but no pitting is produced on pressure There is no fever, and the general health is not affected A change to England or to the mountains causes rapid disappearance of the symptoms

Cacophoria Tropicalis

The term 'euphoria' is often used to denote a feeling of *bien être*, usually experienced when all the organs and systems of the body are functioning at their best. I have coined the term 'cacophoria' (from the Greek *Kakos*—ill, bad) to indicate the opposite condition, so common in the Tropics One feels constantly tired and below par, and everything is an effort The feeling is particularly marked in the morning on rising, the old Anglo-Indian described it by the popular and well known expression, 'I feel like death' *It is not* one of the minor neurasthenic complaints found in the Tropics such as the 'Punjab head of Sir Havelock Charles, one does not feel particularly nervy or irritable the symptoms are bodily fatigue, mental lassitude, and the lack of a sense of complete health and wellbeing The best treatment is a trip to Europe, but this is seldom possible, and frequent changes to some hill station are to be recommended. Tonics, vitamins, and hormones do very little

Chills

Old tropical residents are terrified of 'chills', a term applied to sudden slight falls in the temperature of the atmosphere

'immersion foot' in the Second In coldstroke the patient complains of feeling torpid and of intense weakness, particularly in the legs, his face is cold and pale, his lips blue, he can hardly see, and staggers *along as though he were drunk, finally, utterly* exhausted, he sits *or falls down prostrate overcome by an unconquerable* desire to sleep His temperature is subnormal, falling lower and lower until death supervenes

Wrap the patient in woollen blankets and keep the temperature of the room or hut low, raising it only very gradually Snow may be gently rubbed all over the body, give a little brandy or sal volatile in cold water Some authorities advise tepid sponging, with gentle rubbing, and warm drinks Ichthyol in olive oil is most useful for the frozen parts For prevention, keep moving, breathe through the nose, choose proper clothing, furs and woollen garments, the latter being preferable

Aden Oedema (*Red Sea Oedema*)

When an Eastern-bound steamer approaches Aden in the Red Sea, quite a number of passengers, particularly those on their first voyage to the Far East, suddenly notice a marked swelling of their feet The swelling is soft, and pressure with the forefinger will leave a deep depression There is hardly any discomfort and no pain, but naturally the passenger gets very nervous and rushes to the doctor The condition is a puzzle to the recently appointed medical officer on his maiden voyage In the old days he usually suspected Bright's disease and put the patient on a strict milk diet, or, on finding the urine negative, he would suspect heart disease and place the patient at complete rest in bed with plenty of digitalis and strophanthus The modern young ship's doctor, who, before being appointed, has taken a course in tropical medicine and has been imbued with the importance of nutritional diseases, is apt to suspect beri-beri, and immediately pumps into the patient large doses of vitamin B_1 he is particularly keen on 'Benerva forte', or better still 'fortissimo', which gives such miraculous results in beri-beri No harm is done to the sufferer from this energetic treatment, but the swelling is not in the least influenced However, the prognosis is excellent—it will disappear spontaneously a few hours after the boat has entered the Indian Ocean It will also disappear if the patient is placed in an air-conditioned cabin

Aden or Red Sea Oedema is not limited to the southern part

The advance did not take place at that time, but the Admiral's prickly heat was cured.

Another great military leader also suffered badly from prickly heat: the famous Marshal Rodolfo Graziani, then General Graziani, commanding in Somalia. No, I am not breaking the Hippocratic oath of secrecy in giving this information, for Graziani was most loquacious about his prickly heat! He even mentioned it at press conferences, and invariably added that only one thing gave him relief: Castellani's Prickly Heat Lotion.

Moonstroke

Sailors firmly believe that to stand for long on deck bareheaded in the light of the full moon causes giddiness, headache, and sudden night blindness. They call it 'moonstroke'.

During my voyages to the Far East I have often noticed that passengers sleeping on deck in the moonlight, instead of in their cabins, because of the heat, often awake complaining of headache and a peculiar sense of mental stupor. It is no new observation. Pliny the Elder described *stupor lunaris* nineteen centuries ago.

Few people realize that lunar influences were given tremendous importance until comparatively recent times. In the middle of last century articles still appeared in medical journals from time to time emphasizing the rôle of the moon in the causation of mental disease (lunacy).

The ancients believed that menstruation and pregnancy were under lunar influence [illegible]

Morbus Boreae (Wind Syndrome)

"Diseases due to winds? What next!" the weary reader will ask, if his eyes are still open. [illegible]
one who, in Africa, has [illegible]
and the Khamsin blow [illegible]
that [illegible]
of [illegible]
[illegible]

which would pass unnoticed or be quite easily borne in a temperate climate, in the Tropics they induce a most uncomfortable sensation of cold and malaise, and may precipitate an attack of fever in a malarial carrier, or of dysentery in an amoebic carrier Old sojourners in the Tropics are also very sensitive to draughts, the blast produced by an ordinary electric fan may produce a wry neck Hence the lingering affection of some of them for the old-fashioned 'punkah' this is a swinging contraption made of cloth, stretched on a rectangular frame, and suspended from the ceiling It is worked by a cord pulled rhythmically by a native boy, the 'punkah wallah' In the old days the punkah wallah was made to sit on a tall stool with a narrow top to prevent him from going to sleep

Prickly Heat

This is an extremely common skin eruption in the Tropics—especially in the hot, damp regions, it consists of numerous red papules, some of them capped by tiny clear vesicles The irritation is unbearable I well remember an Italian admiral in command of the naval station of Massawa during the Ethiopian War He was covered with it from head to foot, the pruritus kept him awake, and he was indeed on the verge of a nervous breakdown No lotion or ointment did any good When a hospital ship was in harbour, he would rush on board for a few hours to get some relief in one of the air-conditioned cabins One day he was called suddenly to Army H Q, at that time in the mountain region of the Tigre, for a conference with the 'Generalissimo', who in theory also controlled the navy Within twelve hours the eruption had completely gone, it reappeared on his return to Massawa, but in a much milder form

After this experience the Admiral, in talking to his friends, often expressed the hope of being summoned again to a conference The Commander-in-Chief, a very kind-hearted man, hearing of the Admiral's desire and knowing quite well the

on a further strategic advance into the heart of the enemy coun-try, it is essential that we should discuss in detail and at length the full co-operation between the Army and the Naval forces stationed in Abyssinian waters" (*The latter consisted of a steam-launch on Lake Tana, a petty officer, and eleven ratings!*)

APPENDIX II

MEDICAL ASPECTS OF THE ETHIOPIAN CAMPAIGN

IN 1937 AND 1938 I was invited by a number of learned societies to give lectures on the medical aspects of the Ethiopian War, and the French Government asked me to be their guest in Paris and deliver an address on the same theme at the famous Sorbonne. I had an even greater honour in March 1937, while in New Orleans, when I received a telegram from the White [illegible] ness.

I went to the White House and saw the President in his office, where he kept me talking for about half an hour, no one else was present. He certainly gave me the impression of being a man [illegible] subject in Washington, to the Army and Navy medical officers and to the Public Health Service officers. The lecture was delivered on April 9, 1937, *in the Auditorium of the Department* of Commerce, under the auspices of the Surgeon-General of the U.S. Army. It was published in full in the *Military Surgeon* of July 1937, from which I transcribe it almost verbatim.

* * *

The war began on October 3, 1935, and ended on May 9, 1936, with the proclamation of the Italian Empire, four days after the fall of the Ethiopian capital, Addis Ababa. During this period the white troops on the northern front (Eritrea) and the southern front (Somaliland) numbered approximately 500,000 men, including the Militia and the Gendarmerie and other police forces, naval ratings, and the numerous labour battalions. It was, I believe, the first time in the history of the world that so

The Ghibli. '*Ghiblitis (Ghibli Syndrome)*'

The Ghibli is a violent wind which blows into Tripoli (Libya) from the southern desert from time to time, bringing with it an enormous amount of yellow, irritating sand Some people, under its onslaught, become really ill They grow exceedingly nervous and irascible, and cannot sleep The eyes are congested and lachrymose, and light gives intense pain The sufferer loses all energy and any desire for work, and takes to his bed, where he remains for days, utterly miserable

The Harmattan '*Harmattanitis (Harmattan Syndrome)*'

The Harmattan is a hot wind originating in the Sahara, blowing westward and carrying sand far into the Atlantic In the months of November and March it meets the so-called North-east Trade Wind and is deflected southward, striking the west coast of Africa, where it is dreaded It is a very dry wind and extracts moisture from everything, from furniture to human beings Furniture creaks and groans in a most supernatural way, human beings feel their skin dry, hard and painful, and cracks develop There is severe general malaise and bleeding from the nose Wren's description has remained a classic

"That terrible wind that carries the Sahara Desert a hundred miles to sea, not so much as a sand storm, but as a mist or fog of dust, fine as flour, filling the eyes, the lungs, the pores of the skin, the nose and throat, getting into rifles, the works of watches and cameras, defiling water food, and everything else, rendering life a burden and a curse

The Khamsin

This is a dust-laden wind which blows in Egypt for three, six, or nine days at a time during a period of fifty days (*Khamsin* means fifty) about Easter time It is a hot wind and very enervating When Rommel penetrated western Egypt with his *Panzer division*, the Khamsin several times stopped all desert fighting the immense thick clouds of sand whirled up by it obscured the sun, and day became night

Major-General G L Verney, in his book *Desert Rats*, describes it, in accurate and sober terms, as the wind *that makes* life unbearable, for it is impossible to cook or carry on any other activity, and visibility is reduced to a few yards

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large a mass of white troops had been transported to a tropical zone for military purposes

The thought that half a million young white soldiers would be fighting in tropical Africa—a large part of it with a torrid climate—caused serious misgivings to the experts, as for many years it had been recognized, and had become an axiom among General Staff Officers, that, to prevent losses from sickness endangering victory in colonial wars, the bulk of the troops employed should be natives

Articles appeared in many newspapers and magazines expressing the view that the Italians, even if unbeaten by the Abyssinian Army, would be destroyed by disease These prophecies were based on sound historical facts, and the following are a few examples

In 1890 the French in Tonkin lost 1,125 men killed by disease out of a total of 8,505 white troops In the French expedition in Madagascar in 1895, during the ten months March to December, more than a third of the troops died of disease The white forces consisted of 9,600 men, and there were 3,417 deaths from disease In the Cameroons, the German losses from disease amounted to 112 per thousand troops employed, while at home the German Army had a mortality of 5 per thousand

In the Boer War the number of deaths from disease was nearly double the number of deaths on the battle field and from wounds, it was in the proportion of 1 98 to 1

Mortality and sickness statistics for the Boer War are available only from February 10, 1900 In the official report for the year 1900, published in the *British Medical Journal* (January 18, 1902), figures are not given for January, nor for the first ten days of February, and none for the last week in February, we will therefore consider the period of seven months from March to September 1900 During this period, among a total of, at first, 194,000 men (according to some authorities 151,000), and later 200,000 (according to some authorities 186,000), there were 5,219 deaths from disease The complete statistics for the whole army during the first months (the war began on October 11, 1899, with fewer than 50,000 British troops) are not available, but there are some imperfect statistics for one or two localities For instance, at Ladysmith the white troops amounted to 13,496, and of these 10,668 were admitted to hospital during the

first four months (November 1899 to February 1900) There was a loss of 3,332 men, the great majority of them from disease

During the First World War the British East African Expeditionary Force, fighting from 1916 to 1918, had an average strength of 50,000 officers, non-commissioned officers, and men 2,704 were killed in action or died of wounds, and 6,308 died from disease The Italian Expeditionary Force in Albania, in 1918 had very severe losses from disease, and so had the French and British forces in Macedonia

It was most fortunate that the head of the Italian Government realized immediately the enormous importance of medical preparation and organization in a colonial war, and paid the same attention to it as to the purely military preparation The requests I made to him for medical personnel and hospitals [illegible] quinine and other essential drugs, disinfectants, sera, and vaccines were despatched to Africa, as well as hospital, X ray, and laboratory equipment of every kind, and huge quantities of cotton wool, gauze, and bandages I can testify that on more than one occasion the despatch of medical and sanitary materials took precedence over the despatch of munitions and war material

Here are some details of the medical organization

Hospitals

1 The Italian Army in Africa during the war had

135 base and field hospitals Each base hospital had, in addition to the medical and surgical wards, a bacteriological laboratory and an X ray department
55 small hospitals, transportable on mules
13 special surgical units
15 motorized X ray laboratories
11 dental motor ambulances.
4 central institutes for special chemical and bacteriological investigations
12 disinfecting sections

6 disinfestation stations
139 large water sterilizers of special pattern, *potabilizzatori*
4 general magazines and depots for medical supplies

2 The Navy had 20 hospitals and infirmaries along the coast, and eight hospital ships splendidly equipped, six of which were air conditioned

3 The Air Force had 22 infirmaries

4 The Colonial Medical Service, reorganized by H E Lessona, placed at the disposal of the Army Medical Service its 30 hospitals and clinics and its laboratories in Eritrea and Somaliland.

5 At home, too, the Director of the Army Medical Service, Surgeon Lieut General Franchi the Director of the Naval Medical Service, Colonel Arturo Monaco, the Director of the National Militia Medical Service, Surgeon Lieut -General de Plato, and the Director of the Civil Public Health, Professor Petragnani, helped the medical organization in Africa in every possible way

Medical Personnel

There were in Africa

Officers of the Royal Army Medical Corps and Militia	2,205
Officers of the Royal Naval Medical Corps	117
Officers of the Air Force Medical Service	42
Colonial Medical Service	120
Total	2 484

To these may be added about half-a-dozen doctors of private concerns, such as the Gondrand Company who were always ready to assist their medical colleagues in every way

By order of the Head of the Government all the army medical officers had followed a course on tropical diseases at the University Tropical Clinic of Rome

Pharmacists and Chemists There were in Africa 178 army pharmacists and chemists—all officers—and ten in the navy

Army Chaplains —Strictly speaking army chaplains do not belong to the medical organization, but they spend much of their time in hospitals comforting patients are often with the men

and assist greatly in making acceptable and even popular certain prophylactic measures, such as malaria prophylaxis There were 268 army chaplains with the troops, also ten naval chaplains with hospital ships and with naval ratings on shore They all did excellent work

Red Cross Nurses—384 nurses served on board the hospital ships and in base hospitals Among them was the Crown Princess Marie José, an admirable nurse, who provided a fine example She served as an ordinary nurse, without any privileges whatsoever

The Marchesa di Targiani, most efficient Superintendent of the Red Cross nurses, directed that all nurses going to East Africa should first take a course in tropical nursing at the Tropical Clinic in Rome She was ably assisted by Princess Cito, [illegible]

wounded and sick

Hospital Attendants and Male Nurses (So-called Sanitation Troops)—There were 15 500, always ready, not only to help the sick, but when there were few of these in hospital (and this was practically always the case), they volunteered for labourers' work and became road makers

[illegible]
hc [illegible]
sh [illegible]
satisfactorily

Heads of the Various Medical Services—At the Head of the Army Medical service [illegible]
tropical expe [illegible]
senior Surge [illegible]
tropical expe [illegible]
Colonel or senior Lieut Colonel) of the Naval Medical Service, with ten to twenty doctors under him

This, then, was briefly the health organization Let us study the results, which can at least in part be ascribed to it

Malaria

In many colonial and non-colonial wars of the past, malaria has been the great scourge that has interfered with war operations

In the First World War, *the real cause that paralysed for so* long the advance of the Allied Armies in Macedonia was *malaria* *Who does not remember the Struma Valley? I have* seen battalions with 95 per cent of soldiers and officers stricken *with malaria a few weeks after arrival* *In 1916, in the British* Macedonian Expeditionary Force, with a strength of 123,583 men *(including officers)*, there were 71,412 admissions to hospital for malaria, with 287 deaths In 1917 the strength of the force rose to 182,583 men (including officers), there were 71,412 admissions to hospital for malaria with 228 deaths, and in addition there were 43 cases of blackwater fever, with 12 deaths The bulk of the cases, namely, 60,977, occurred during the period May to November, which is, in the Balkans, the malaria season In the Tropics the malaria season may be said to extend to the whole year

In 1918, with a force amounting to 128,747 men and officers, there were 59,087 admissions to hospital for malaria, with 272 deaths, and to this number should be added 133 cases of blackwater fever, with 28 deaths Very heavy losses from malaria were sustained also by the French and Italian forces

In the East African Expeditionary force in 1916, with an average strength of 58,114 men and officers, there were, during the seven-month period June to December, 50,768 admissions to hospital for malaria, with 263 deaths In *1917*, the average ration strength of the expeditionary force was 50,702 men and *officers, there were 72,141* admissions *to hospital for* malaria, with 499 deaths

*In the Ethiopian War malaria did not give very serious con*cern, although it should be noted that, on the northern front, a *number of zones, such as Mareb region* were badly malarial, and on the southern front all the zones were terribly malarial, *the disease being general among the indigenous* Somali population Naturally there were a certain number of cases among the *Italian troops, and an occasional pernicious one*, but the total number and the mortality were infinitely lower than had been expected

With a white army approximating half a million men, there were 1,241 *cases of primary malaria admitted to hospital*, and 1,093 admissions for relapses, with 23 deaths from pernicious *forms, including blackwater fever, which was extremely rare*

Judging by the East African Campaign during the First

World War, we should have expected an enormous number of admissions to hospital for malaria—well over 300,000, and over 2,500 deaths from it

What were the prophylactic measures taken? With the troops continually on the move, and the area of operations being enormously extended, mechanical prophylaxis, such as mosquito nets and antilarval measures, was often impossible From the beginning we insisted on quinine prophylaxis every *soldier received three* tablets a day of *quinine* sulphate or bihydrochloride—each tablet containing 0 2 gm (3 gr) A good example was given to the ranks by those in authority, at every meal the Commander-in Chief in Somaliland, General Graziani, and all his staff officers took quinine regularly General Achille Starace, on the northern front—at the head of the *Black* Shirts—took quinine regularly, and this helped me greatly In Somaliland I once found a group of Black Shirts who were not over-enthusiastic about quinine prophylaxis, in fact, one non commissioned officer, who had been a long time in Brazil,

[illegible]

quinine, he changed his opinion, or, to be more correct, he added quinine to his own method of prophylaxis It must be remembered, however, that the 'prophylactic' in which he had *real* confidence was obtainable in only small quantities, and then *only in* the evening The men also knew that we could find out whether or not they had taken the quinine They were frequently paraded, and one in every ten or twenty men was made *to pass* urine This was tested with Tanret s reagent when a few *drops of this are added, if the quinine* has been taken the urine *becomes turbid* When the Tanret reagent was not available, *we used my method* which consists of simply adding pure carbolic acid This produces a cloud in urine containing quinine the cloud disappears on heating

In Somaliland, a special anti malarial service was instituted, with officers *whose sole* duty it was to prevent and fight malaria The results were excellent

Dysentery

Dysentery has always been one of the worst scourges of the armies in wartime. In ancient times generals feared the 'blood flux' more than they did the enemy.

Dysentery was rampant in the Middle Ages, during the Crusades In 1270, during the Seventh Crusade, at Tunis and Carthagena, an enormous number of Christian soldiers died from the disease, among them Louis IX of France and his son Tristan

In modern times it is sufficient to remember the heavy losses from dysentery suffered by the French in their wars in Algeria and Tunisia, in the Tonkin War, and in the expedition to Madagascar

In the Boer War, too, dysentery was rampant and caused very heavy losses During the First World War the British Expeditionary Force in Gallipoli, consisting of 112,677 men and 4,161 officers, had, during the campaign which lasted from April 24, 1915, to January 8, 1916, 29,728 cases of dysentery, with 811 deaths more than a quarter of the whole force contracted the disease If we add the 10,383 cases of diarrhoea admitted to the hospital, we see that a prodigious number, more than a third of the army, suffered with severe intestinal trouble requiring hospital admission

In the Macedonian Expeditionary Force, whose strength in 1918 was 128,747 men and officers, there were during that year 24,245 admissions to hospital for dysentery, with 480 deaths

In the East African Expeditionary Force in 1916, in the seven months June to December, with a strength of 58,114 men and officers, there were 8,902 admissions to hospital for dysentery, with 306 deaths In 1917 with a strength of 50,702 men and officers, there were 14,045 admissions for dysentery, with 429 deaths

During the Italo-Ethiopian War, there was a total of 453 hospital cases of dysentery, with no deaths One death occurred from a complication (pneumonia) some days after the termination of war It may therefore be said that during the war in Ethiopia there was not a single case of death from dysentery. The great majority of cases were amoebic, in fact, all the cases were diagnosed as amoebic in the official hospital returns It is possible that some mistake may have been made at times in the

diagnosis, and that some few cases may have been bacterial, but what is of importance from a practical point of view, and for comparison purposes, is the total number of cases of clinical dysentery From experience of other colonial wars, there should have been at least 80 000 to 100 000 cases of dysentery, with three—or four—thousand deaths

What prophylactic measures were taken?

(a) Every effort was made to give the officers and men pure drinking water Practically all the officers drank mineral waters—such as S Pellegrino and Fiuggi—bottled in Italy and shipped to Africa in gigantic quantities I do not think that there has been any war previously in which mineral waters have been used on so large a scale For the troops, and at times for officers too, local water, obtained from rivers and wells, was used, always being purified by boiling or by some method of chlorination Distilling plants were erected in several places in both Somalia and Eritrea. Officers and men in warships and hospital ships drank the noted Serino water, imported by cistern-boats from Naples, where it is the normal city supply Serino water is one of the best waters in the world, very light and bacteriologically pure The first troops landed in Somalia, when near harbour, also received Serino water, as we were given to understand that water was extremely scarce We soon found, however, that we could always get water by drilling wells deep enough. It was, of course, always boiled or chlorinated A method of chlorination which we found useful for troops on the march, and during the campaign, was the use of a fairly stable chlorine preparation in tablet form called Steridrol, put on the market by Molteni & Co of Florence one tablet to a litre of water

(b) The men were recommended to get into the habit of washing or disinfecting their hands with a two per cent solution of lysol or lysoform after visiting the latrine and before having meals. The lysol disinfection of the hands was strictly enforced on cooks and others working in the kitchens In Somalia, in many latrines and outside every kitchen, there was a receptacle, fixed to a post, containing a two per cent solution of lysol or lysoform. The receptacle was usually a discarded petrol tin, with a small tapering metal tube at the bottom, or a short rubber tube in which a glass pipette was inserted, from which the Liquid would fall drop by drop In some cases discarded mineral-

water bottles were used, by making a hole in the cork and inserting in it a small metal or glass tube The soldier exposed the palms of his hands to the dripping fluid, and after receiving four or five drops he rubbed the hands together and let them dry naturally without the help of cloth or paper There was no harm in his handling or touching food immediately after, even if the hands were still moist, the amount of lysol that could thus be transferred to food being too small to do the slightest harm

(c) *Vaccine and Drug Prophylaxis* —Dysentery in the regions where the war was fought being mostly amoebic, no vaccines were used Vaccines were not used for the additional reason that such vaccines, when containing the Shiga-Kruse bacillus, give a severe reaction, even when prepared according to modern methods With regard to oral dysentery vaccines, although my associates and I have worked on the subject for several years, I have not been able to convince myself that they are really efficacious One of my assistants, one of my technicians, and myself, in 1935, took daily for two months a liquid formalized vaccine It did not cause any discomfort, but our blood never showed presence of agglutinins, and not a trace of immune bodies could be put in evidence using Pfeiffer's phenomenon In the lower animals (monkeys) slightly better results have been obtained, and the preparation of a dysentery vaccine for oral use is certainly worth further investigation With regard to the use of a bacteriophage as a prophylactic, too little research had been done to lead to any definite conclusion [The sulpha drugs were then unknown] As to therapeutic or chemical prophylaxis, a few officers, knowing that the dysentery in East Africa was usually amoebic, took one or two pills of yatren daily, but the number of individuals doing this was too small to justify any conclusions

(d) *Abdominal belt* —A grandmotherly precaution was adopted Each soldier was provided with and had to wear a flannel abdominal belt, or 'cholera belt' I had the impression that this was a useful measure it tended to prevent abdominal chills, thereby rendering the soldier less liable to develop dysentery, even if he was a carrier Dysentery patients clamoured

[illegible]

back was that in many cases the area of skin protected by the belt became covered with prickly heat

Typhoid and Paratyphoid

Cases of typhoid and paratyphoid infection have been very common in past colonial wars In the French war in Tunisia in 1881, among the French troops, numbering 20,000 men, there

smaller) In the Spanish–American War (1898), the Americans

absent. In Eritrea there was a small number of cases, but the total was much less than that encountered during the same period of time among the same number of troops in Italy In Somaliland and Eritrea we had a total of 458 cases, with 161 deaths (the small outbreaks of typhoid paratyphoid in the tropics always have a high mortality) According to certain previous colonial wars, there might have been in Abyssinia over 50,000 cases with several thousand deaths

Among the precautions taken, one of the most important was vaccination with mixed vaccines, great care being taken in the preparation of the vaccine, both in the laboratories of the Institute of Public Health and in private laboratories The vaccine used was the tetra-vaccine Typhoid + paratyphoid A + paratyphoid B + cholera, as introduced by me in the First World War and previously in Ceylon It was adopted during the First World War by the American Red Cross Mission in Macedonia, at the head of which was Colonel Richard Strong

Typhus

This is one of the most deadly diseases to which armies are exposed during wartime Suffice it to remember the terrible epidemic in Macedonia during the First World War, when a quarter of the Serbian Army was wiped out by typhus The

Italian Army there was not a single case. What was the reason? Rigorous cleanliness among the troops It was most exceptional to find a soldier infested with lice, while louse infestation was common among the Abyssinians

Relapsing fever

Where there is typhus there is usually relapsing fever Among the Italian troops the disease was rare, 17 cases being reported with no case of death It was always Tick relapsing fever The Abyssinians had many thousands of cases the total is believed to be between twenty and thirty thousand

Smallpox

There were a great number of cases among the Abyssinians During the first few days of the occupation of Addis Ababa, I myself saw several infected persons walking about the public market place There was only one case among the Italian troops, and he recovered

Heat stroke

During the whole war heat stroke was almost completely absent, there was a total of thirty cases, with seven deaths It may be remembered that during the First World War the British Expeditionary Force in Mesopotamia, in 1917, had 6,242 cases, with 524 deaths The principal precautions taken were the following

1 The use of a sun helmet by every soldier

2 No alcoholic drinks, not even a glass of wine, before sunset

3 Wherever possible marching was avoided and the troops were driven in motor lorries

Avitaminoses Beri-Beri

In several previous wars in tropical and subtropical areas there have been epidemics of beri-beri for example in the campaign in Arabia during the Great War As is well known, the disease is due to a deficiency of Vitamin B_1 (thiamin) in the diet The patient feels tired gets out of breath easily finds difficulty in marching, then the whole body swells and becomes oedematous In the last stages the oedema disappears, the muscles become atrophied and the patient resembles a skeleton, having been reduced to skin and bone

From reports I received in Addis Ababa there were a number of cases among the Abyssinian troops, and we saw several

among the prisoners, not a single case was reported among the Italian troops One case developed after the termination of war, and was treated in the Hospital for Tropical Diseases in Rome

Pellagra

We saw several cases among the prisoners but none among our own troops

Scurvy

In ancient times scurvy was often a scourge of the armies in wartime As is well known the disease is caused by a deficiency of Vitamin C The patient feels tired, has pains in the joints, the gums swell and bleed Later the skin becomes covered with petechiae and haemorrhage occurs The soldier can no longer march and is useless

Scurvy was rampant in the Abyssinian Army on the Somali land front. From reports of foreign doctors in the Ethiopian Red Cross they had over 30 000 cases There were no cases in the Italian Army What was the reason? A small precaution—every soldier was given a lemon a day

Prophylaxis of Avitaminoses

The princip [illegible]

[illegible] he likes In my opinion it is a mistake to alter radically or too suddenly the ration to which a soldier is accustomed We added to the ordinary ration a lemon a day The following was a soldier s ration in Africa

Bread	Grams	800 (later diminished to grams 650) daily
Macaroni and spaghetti		200 six times a week.
Rice		180 once a week
Beef		300 (later diminished to 250) daily
Beans and potatoes		60 beans or grams 120 potatoes daily
1 apple 1 banana, or a few dates when obtainable daily		
Condensed milk	Grams	40 twice a week
Marmalade		50 twice a week.
Salad (fresh)		80 when obtainable (very seldom in Africa)
Tomato sauce		15 (later diminished to ten) daily
Cheese		15 (later diminished to ten) daily
Olive oil		20 daily
Salt		20 daily

Sugar	. . .	„	25 daily (50 in the mountainous regions of Ethiopia).
Coffee	. . .	„	15 daily (grams 30 in the mountainous regions of Ethiopia) Later grams 18 daily in all regions
Wine	. . .	250 c c.	daily when obtainable
Brandy	. . .	30 c c	in the higher regions
		20 c c.	in the lower regions of Eritrea and Somalia, once a week.
Tobacco	. .	Grams	20 once a week (increased later to grams 35).

Filariasis

No cases

Ancylostomiasis

No cases

Tapeworms

Tapeworm infestation, usually due to *Taenia saginata*, is extremely common among the natives of Abyssinia, practically every native suffering from it at some time or other, the reason being their habit of eating raw meat Some of the better-class natives regularly drink, once every three months, an infusion of kousso flowers, which is a powerful vermicide This is taken on a certain day, which is called the 'kousso flower day'. There is also a 'diplomatic kousso flower day' When a small chief calls on a big chief and the latter for any reason does not want to see him, but wants to be polite, the big chief will send, through a secretary or servant, the following message· "I deeply regret that I am unable to see you today as it is my kousso flower day."

Among the Italian troops tapeworm infestation was extremely rare; only two cases were recorded, both of *Taenia saginata*.

Leprosy

Some Abyssinian prisoners were found to be affected with leprosy, which is very common in Ethiopia There were no cases among the Italian troops

Tetanus

Five cases, with four deaths

Gas gangrene

No cases.

Cerebrospinal meningitis

No cases

Cholera

No cases

Plague

No cases.

Surgical

[illegible]

staffed by surgeons of great experience, into which only surgical cases were admitted and treated As a rule, surgeons had not much to do, and certainly they were never overworked Septic complications were not frequent. Gas gangrene was absent A rather large number of wounds were of considerable dimensions, and showed great destruction of tissues, being caused by explosive bullets The most terrible wounds, however, were those inflicted with native swords and knives.

Wild Beasts and Poisonous Snake-bites

In some regions of Somaliland wild beasts abound, and the two large rivers, Giuba and Shebeli, are infested with crocodiles Poisonous snakes are far from rare The Italian troops suffered very little damage from these causes not a single death due to attacks by wild animals, and no deaths from snake-bite Occasionally a soldier falling into the river was a prey to crocodiles.

Scorpion-sting

We had several cases, especially in Somalia, but none were fatal The sting was often extremely painful, so that injections of cocaine and morphine had to be given No serum was used, only *1* in 200 solution of potassium permanganate, which was applied freely to the part and also injected near the sting

